304 228 29.3 129 20 AAW99505 Glycoprotein hormo	228 29.3 129 20 AAW99496 Glycoprotein	227 29.2 111 21 AAB19348	227 29 2 129 20 AAKS4159	227 29.2 129 20	226 29.1 109 21 AAY92002	226 29.1 132 20 AAW99550	225 29.0 129 20 AAW99504	224 28.8 45 8 AAP70921 S	224 28.8 46 3 AAP20251	224 28.8 112 14 AAR31002	224 28.8 129 20 AAW99497	222 28.6 129 20 AAW99499	222 28.6 129 20 AAW99501	222 28.6 223 22 AAU04610	222 28.6 223 22 AAE04482	222 28.6 226 16 AAR86267	222 28.6 226 16 AAR86255	222 28.6 226 22 AAE04516	221 28.4 46 16 AAR64278	221 28.4 111 22 AAM52075	.220 28.3 111 22 AAM52078	219 28.2 111	218 28.1 111 22 AAM52076	218 28.1 229 16 AAR86250	218 28.1 229 22 AAU04605	218 28.1 229 22 AAE04477	217 27.9 111 22 AAM52030	217 27.9 111 22 AAM52063	217 27.9 111 22 AAM52065	217 27.9 111	217 27.9 111 22 AAM52087	217 27.9 129 20 AAW99543	217 27.9 132 20 AAW99549	217 27.9 222 16 AAR86256	217 27.9 222 22 AAU04611	27.9 222 22	217 27.9 239 20 AAY43287	27.9 239 20 AAY43294 HFSH beta subur	216 27.8 111 22 AAM52023 Human FSH-beta	216 27.8 111 22 AAMS2024 Human FSH-beta	216 27.8 111 21 AAMS2029 Human FSH-Deca	27.0 111 22 AAMS2040 HUMBIN	216 27.8 111 22 AAMS2044 Human PSH-beta			ALIGNMENTS		RESULT	AAX92000	ID AAY92000 standard, Protein; 140 AA.		AC AAY92000;		DT 19-JUL-2000 (first entry)				An minimum into touth guineoutopini, beca subunit, chor, mutanit, KW cystine knot growth factor: hairnin loom: thyroid stimulating hormone.			OS Homo sapiens.		Fr Ney Month of 57	Domain		FT Misc-difference 137
Human single chain	Single chain gonad	hCG/bLH chimera, D	Buman single chain	Single chain gonad	Human beta-hCG pro	Human chorionic go	Human chorionic go	Human chorionic go	Human chorlonic go	Partially deglycos	Human single chain	Modified hCG beta-	HCG analogue-DGT b	hCG/hTSH chimera,	Single chain gonad	Human chorionic go	Human CG beta subu	Equine chorionic g	Human beta-hCG pro	Human chorionic go	Human chorionic go	Cat luteinising ho	Equine chortonic g	Equine chorionic g	Equine chorionic g	Equine chorionic g	Horse chorlogonado	Equine chorionic g	hCG/hFSH chimera,	Bovine lutropin be	hCG/hFSH chimera,	hCG/hFSH chimera,	Rat luteinising ho	Human chorionic go	eCG hormone beta-s	Pig lutropin beta-	Sheep lutropin bet	Dog lutropin beta-	ecc normone beta-s	ecc normone beta-s	Source of don ho	Modified himse 1::	HTSH/HCG beta subu	HFSH/HCG beta subu	Beta subunit of hu	hCG/hFSH chimera,	Fish gonadorropin	Fish gonadotropic	HTSH beta subunit-	Mutant human thyro	Mutant human thyro	Mutant human thyro	Human thyroid stim	Wild type numan th	Engineered partial	HISH Deta Subunit-	Clycoprofein borno	BFSH beta subunit-	Glycoprotein hormo	TSH beta subunit.	Human follicle sti	Human folliole sti	Human follicle sti	Human follicle sti	Human follicle sti	hFSH-beta analogue
231 522 67.2 237 22 AAE04523 232 519 66.8 114 17 AAR88921	517 66.5 234 16 AAR8	514 66 2 1145 L2 AARI	514 66.2 237 22 AAE0	513 66.0 237 16 AAR86	509 65.5 98 19	509 65.5 98 19 AAWS	509 65.5 98 19 AAWS	507 65.3 93 22 AAUO	507 65.3 93 22 AAE0	505 65.0 237 16	501 64.5 43/ 22 AAEU4	498 64.1 11/ 14 AAR31	430 04.1 11/ I/ AAKB	490.3 63.9 123 12 AARIS	492 63.3 23/ 16 AARB6	488 62.8 88 22	458 50.2 151 20 AAY43	457.5 58.9 149 14 AAR31	457 58.8 88 19 AAW4"	457 58.8 88 19 AAWS	457 58.8 88 19 AAWS	448 57.7 143 22	44/.5 57.6 169 19 AAWG	447.5 57.6 169 19	447.5 57.6 169 19 AAW3	447.5 57.6 169 19 AAW33	447.5 57.6 169 22 AAB71	447.5 57.6 265 19 AAW65	4.39 56.5 139 12 AAR15	439 56.5 141 22 AAB71	436 56.1 115 12	430 30.1 118 12 AAKIS	430 30.1 141 22 AAB/1	200 20 8.00 C.	429.3 33.3 139 19 AAW47	429 55.2 141 22 AAB71	425 54./ 141 22 AAB/1	422 54.3 138 22	P. 101 1.90 C. 101 101 101 101 101 101 101 101 101 10	420 54 1 134 10	415 53 4 130 7	371 47.7 80 20	354 45.6 204 20 AAY43	330 42.5 203 20	328 42.2 60 10 AAP91	317 40.6 118 12 AAKIS	269 34.6 112 12 AAR19	269 34.6 142 15	261 33.6 186 20 AAY43	251 32,3 118 21 AAY9	250 32.2 118 21 AAY91	248 31.9 118 21	243 31.3 118 20 AAYO	243 21.3 110 21	243 21.3 130 12 AARL	243 31.3 240 20 AAY43	238 30.6 137 20 AAWGG	231 29.7 184 20	230 29.6 129 20 AAW99	229.5 29.5 137 17 AAR99	228 29.3 104 22	228 29:3 108 22 ANEON	228 29.3 108 22 AAEO4	228 29.3 111 22 AAU04	228 29.3 111 22 AAE04	228 29.3 129 20

11-JUN-1999 (first entry)

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This invention describes novel synthetic antigenic peptides (A) based on the human chorionic gonadorropin (hofo beta subunit. These peptides have contraceptive properties and are used for the development of vaccines used to control fertility in ambals and to generate polyclonal antiesta for diagnostic use. The peptides are more specific immunogens than corresponding unmodified peptides are more specific. It et they do not elicit antibodies that cross-react with human lutelinished homone.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 DVRPESIRLAGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPREGDSSS 120
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contraceptive: vaccine; fertility; polyclonal antisera; diagnostic;
immunogen; human lutefailsing hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic antigenic peptides from human chorionic gonadotropin beta-subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 99.1%; Score 770; DB 20; Length 145; Best Local Similarity 100.0%; Pred. No. 1.8e-62; Matches 140; Conservative 0; Mismatches 0; Indels Matches 140; Conservative 0; Mismatches 0; Indels
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                                                                Human hCG beta-subunit peptide structure I.
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AMM95520 In MAM95520 Standard; protein; 145 AA XX
XX AAM95520; XC AAM95520; XC AAM95520; XC A4-NAR-1999 (first entry)
XX XX XX
XX XX AMMan chorionic gonadotrophin (hCG XX H Human; chorionic gonadotrophin hCG XX Human; chorionic gonadotrophin hCG XX M monecular simulation; visual displic
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85US-0804642,
87US-0086401,
92US-0958601,
95US-0467569,
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04-DEC-1985;
17-AUG-1987;
06-OCT-1992;
06-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This is the wild type human chorionic gonadotropin beta subunit. Mutants comprise at least one electrostatic congregates at least one electrostatic charge attering mutation in a beta comprise at least one electrostatic charge attering mutation in a beta compared to state a factor (CKEP) proteins compared to or more mutant cybinish and baving novel properties or improved pharmacological properties, compared to wild type CKEP, are calaned "The CKEP apported in Annances, the platelet efailed growth factors: the diproported in Annances, the platelet efailed growth factors: the cyptoported in Annances, the platelet efailed growth factors: the cyptine know to be structurally similar (sepecially comprising the comparison of the neurotrophins and the transforming growth factor. Beta family, the comparison of the comparison of the comparison of positions in the CKEP harphin loops of family members and other members of the CKEP superfamily could significantly alter the biological cartification and administered to treat or present hypothypothypodism (claimed). They care also useful to treat or diagnose thypoid cannant heerodomer or analogue to stimulate indine to treat the cancer or enables and efacting the cartificatily administering the cancer or enables radiolabel detection (claimed).
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99.1%; Score 770; DB 21; Length 140;

Best Local Stallarity 100.0%; Pred, No. 1.70-62;

Matches 140; Choservative 100.0%; Mismatches 0; John 350 5460

2 SKEPLEPREPINATLAVENECEPOITHETTICACTEPHERULOCUPALEQUYCHE 61 | INTELLEPEREPINATLAVENECEPOITHETTICACTEPHERULOCUPALEQUYCHE 61 | INTELLEPEREPINATLAVENECEPHERULOCUPALEQUYCHE 60 | STREET PRESILE CONTINUE (CONTINUE CONTINUE CONTINUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New mutant cystine knot growth factor proteins comprising one or more mutant subunits, useful for treating or preventing diseases e.g. hypothyroidism and thyroid cancer
/note- "mutant optionally comprises one or more substitutions in these residues"
                                                                                                                                 58..87
/label- beta_hairpin_loop_3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 67; Page 296; 320pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYMA-) UNIV MARYLAND BALTIMORE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Weintraub BD, Szkudlinski MW;
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                                                            34..88
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                                                                Disulfide-bond
Disulfide-bond
Domain
                                                                                                                                                                                                                            W0200017360-A1.
                                                                                                                                                                                                                                                                                                                                                             19-MAR-1999;
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spector-09-813398.pep

Fri Oct 11 17:02:50 2002

. Entered [1delaval 11-Oct-02 6:53]
09-81339-3A
PSKEPLRPR-RATANTANEKEGCPVCITVNTTICAGYCPTNTRVLGGVLPALPOVVCHYRDVRFESIRL
PSKEPLRPRCRPINTLANEKEGCPVCITVNTTICAGYCPTNTRVLGGVLPALPOVVCHYRDVRFESIRL
PGCPRGXNPVVSYAVALSCQCALCRRSTTDCGGRKDHPLTCDDPRRQDSSSSKAPPPSLPSPSRLPGPSD
11

Fri Oct 11 17:02:50 2002

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09-813198-3C

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXCPPMTRVLGGVLPALPQVCNYBDVRPESIRL
PGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRFQDSSSSKAPPPSLPSPSILPQPST
T1

Fri Oct 11 17:02:50 2002

; Entered [jdelaval 11-Oct-O2 6:53] 09-81338-3E XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX PGCPRGXNPVVSYAVALSCQCALCRRSTIDCGOPKOHPLTCDDPRFQDSSSSRAPPPSLPSPSIRPGDS 71

Run on:

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rana cateab
cocurnix co
morone saxa
trichogaste
aneleagris g
canis famil
anguilla ja
thumnus obe
bos taurus
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sus scrofa
geuus cabal
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PD1331-014000_013991.
21.011-1986 (Rel. 01, Created)
21.011-1986 (Rel. 01, Last sequence update)
21.011-1986 (Rel. 01, Last sequence update)
21.001-01986 (Rel. 01, Last sequence update)
22.001-01986 (Rel. 01, Last sequence update)
23.001-01986 (Rel. 01, Last sequence update)
24.001-01986 (Rel. 01, Last sequence update)
25.001-01986 (Rel. 01, Last sequence update)
25.001-01986 (Rel. 01, Last sequence update)
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27.001-01986 (Rel. 01, Last
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SEQUENCE PROM N.A.
HEDLING-81012134; PubMed-6774259;
Fildes J.C., Goodman H.M.;
The Good The beta-subunit of human chorionic gonadotropin suggests evolution of a gene by readthrough into the 3'-untranslated region.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               multiple genes.

J. Biol. Cham. 258:11492-11499(1983).

SEQUENCE OF 1-20.

MEDLINE-81117268; PubMed-7462224;

BITKEN S., Fetcherston J., Canfield R.E., Boime I.;

The amino acid sequences of the prepeptides contained in the alpha and bate subunits of human choriogonadotropin.;

J. Biol. Chem. 256:1816-1823(1981).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human).
Mostayteis, Metazea: Chordata; Craniata; Vertebrata; Euteleostoml; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBL_TAXID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (2) SEQUENCE FROM N.A. HDMed-6690982; HEDLINE-81093590; PubMed-6690982; Talmadge K., Vamvakopoulos N.C., Fiddes J.C.; Talmadge K., Vamvakopoulos N.C., Fiddes J.C.; Froluction of the genes for the beta subunits of human chorionic gonadotropin and lutelnizing hormone."; Mature 307:37-40(1984).
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SECURING—64.008141; PubMed-6194155;
MEDLINE—64.008141; PubMed-6194155;
POLICESTOR P., Ovitt C.E., Hoshina M., Fukuoka H., Boothby M.R., POLICESTOR P., Ovitt C.E., Hoshina M., Fukuoka H., Boothby M.R., Policestor P., Ovitt C.E., Hoshina chorionic gonadotropin is encoded by "The bet" "Annaq":
P80071 E P80071 E P80071 E P8557 E P8557 E P8567 E P8567 E P8567 E P8567 E P8797 E P97957 E P
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   P01233 homo sapien
P0743 papto anubi
P0743 homo sapien
P1500 callithrix
O4664 equus asinu
P19750 equus asinu
P19750 equus asinu
P07505 etals sulve
P07505 etals sulve
P07505 etals santos
P01201 ovis arios
P1308 hypophthalm
P10205 conceptochary
P10205 encochynchu
                                                                                                                                                                                            October 11, 2002, 10:56:18 ; Search time 25 Seconds (without alignments) 218.378 Million cell updates/sec
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777
I PSKEPLKPRCRPINATLAVE.....SKAPPSLPSFSRLPGPSDT 141
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                               GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd
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Maximum Match 100%
Listing first 50 summaries
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Gapop 10.0 , Gapext.0.5
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Maximum DB seq length: 2000000000
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SEQUENCE OF 21-165.
MEDLINE-7211304; PubMed-1150658;
MEDLINE-7211304; PubMed-1150658;
The anino acid sequence of human chorionic gonadotropin. The alpha arbunt acid sequence of human chorionic seabunit. ".
3. Biol. Chem. 250:5247-5258(1975).

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RESULT 2
CGRB_PRANN STANDARD; PRT; 165 AA.
1D GGRB_PANN STANDARD; PRT; 165 AA.
10.74R-1988 (Rel. 07, Created)
16.72R-1988 (Rel. 07, Last sequence update)
16.72R-1901 (Rel. 40, Last annotation update)
17.72R-1901 (Rel. 40, Last annotation update)
18.72R-1901 (Rel. 40, Last annotation update)
18.72R-1901 (Rel. 40, Last annotation update)
19.72R-1901 (Rel. 40, Last annotation update)

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133 N-LINKED (GLCNAC. .).
50 N-TIAC-END 000042.
50 N-TIAC-END 000043.
141 O-LINKED.
147 O-LINKED.
152 O-LINKED.
158 O-LINKED.
159 O-LINKED.
130 D-> A (IM GENE 6).
137 YFII-Q-VAR 003188.
24 P-> M (IM REF 3) AAA53287).
17739 WH; 5598FB9ES1A65748 CRC64.
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ilarity 100.0%; Pred. No. 5.1e-64;
Conservative 0; Mismatches 0; Indels
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165 AA;
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Best Local Similarity
Matches 140; Conserv
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DR EMEL, X00265 CAA25068.1; AIT_INIT.

DR EMEL, X00369; AAA52008.1; DR EMEL, X003189; AAA52008.1; DR EMEL, X003189; AAA52008.1; DR EMEL, X003189; AAA5208.1; JOINED.

DR EMEL, X03180; AAA5208.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RAY STRUCTURE OF CARBOHYDRATES.

RX MEDILARE-2114469; PubMed-1182020;

RM **CELSTRUCTURE OF CARBOHYDRATES.**

RM **CELSTRUCTURE OF CARBOHYDRATES.**

RM **CELSTRUCTURE OF CARBOHYDRATES.**

RY **Site-specific N**Glycopetides by one- and two-dimensional intermediate analysis of glycopeptides by one- and two-dimensional intermediates of glycopetides of
        [6]
HELIMINARY SEQUENCE OF 21-165.
HEDLINE-74011267; Pubmed-4795659;
Carlsen R.B., Bahl O.P., Swaminathan N.;
"Human chorionic gonadotropin. Linear amino acid sequence of the beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PERLIMINARY ASSIGNMENT OF DISULFIDE BONDS.
MEDITME-B1135630, Pubmed-7240231;
MISS T., BAID, D.P.;
MASSIGNMENT of disulfide bonds in the beta subunit of human chorionic gonadogrophi...
B101. Chem. 256:6587-6592(1981).
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MEDLIKE-90094415. PubMed-1688430;
ACCULAGE-90094415. Mountjoy K., Kresicki R.F., Perini F.,
Ruddon R.M.:
Ruddon R.M.:
"Bole of disulfide bond formation in the folding of human chorionic
gonadotropin beta subunit into an alpha beta dimer assembly-competent
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-1- SIMILARITY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN FAMILY.
                                                                                                                                                                                                                           7) ENCLY.
SEQUENCE 1-5 FROM N.A. AC12163;
SEQUENCE 01-5 - Datiels - Wequeen S. Carle G., Bolme I.;
Policastro P.F. - Datiels - Wequeen S. Carle G., Bolme I.;
A map of the hGG beta-IH beta gene cluster.";
J. Biol. Chem. 261:5907-5916(1986).
                                                                                                                                                                                                          Biol. Chem. 248:6810-6827(1973).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Biol. Chem. 265:312-317(1990).
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Whol. Endocrinol. 6:904-913(1992).

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Whol. Endocrinol. Whitch Componer.

Whole Endo. J. Med. 136:179-18(1992).

Whole Endo. J. Whol
01-NOV-1995 (Rel. 32, Last sequence update)
16-CCT-2001 (Rel. 40, Last annotation update)
Lutropin beta chain precursor (Luteinizing hormone beta subunit) (LSH-
nes) (LSH-B) (LH-B).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The street of the street of the street of the street of the subunit of human pitultary luteinizing hormone (hill);

J. Clin. Endocrinol. Metab. 36:618-621(1973).
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MEDITAR=-666247; PubMed-1191677;

SALTAM M.R., Li C.H.,

"Human pitultary lutropin, isolation, properties, and the complete sequence of the beta-subunit.";

Blochim. Blophys. Acta 412:70-81(1975).
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STRUCTURE BY NAK OF 58-77,
MEDLINE-92157029,
MEDLINE-92157029, PubMed-1495492;
Kettmann H.T. Hua Q. A., Welss M.A.;
Kettmann H.T. Hua Q. A. Welss M.A.;
Kettmann H.T. Hua Q. A. Ecceptor-binding fragment from human luteinizing
hormone beta-subunit determined by [IH]- and [15M]nuclear magnetic
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STRUCTURE-91122088 PUBME-1991473;
WELSHARI G., HIYARA J., RENVICK A.G.C., NIMEZ M.;
WELSHARI G., HIYARA J., RENVICK A.G.C., NIMEZ M.;
WENT investigations of the N·linked oilgosaccharides at individual glycosylation sites of human lutropin.*;

Eur. J. Blochem. 195:257-268(1991).
                                                                                                                                                                                                                  Enkaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mamalia; Eutheria; Primates; Catarrhini; Bominidae; Homo.
NCBL_TAXID-9606;
                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE-84093590, PubMed-6690982;
MEDLINE-84093590, PubMed-6690982;
MEDLINE-84093590, PubMed-6690982;
"Evolution of the genes for the beta subunits of human chorionic gonadotropin and luteinizing hormone.";
Nature 307:37-40(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY PARTIAL SEQUENCE.
WHOLKME-7321227; rebladed-41207;
CLOSSET J., Bennen G., Lequin R.M.;
"Human lutelinizing hormone. The amino acid sequence of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (3)
PRELIMINARY SEQUENCE OF 21-141.
MEDLINE-73090987; Pubmed-4685398;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    subunit.";
FEBS Lett. 29:97-100(1973)
                                                                                                                                                                                 Homo sapiens (Human)
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                                                                                                                                                    THE STRUCTOR STRUCTURES THE OVARIES TO SYNTHESIZE THE STEROIDS THAT ARE SESENTAL FOR THE MATHERANCE OF PREGRANCY.

1- SCHOUNT: HITCHERODINER OF A COMMON ALPHA CHAIN AND A UNIQUE BETA CHAIN WHICH COWERS BIOLOGICAL SPECIFICITY TO THYROTROPIN, LOTROPIN, COLLITROPIN AND GONADOTROPIN.

1- INSCRILANOSIS. SPECIFICITY: PLACENTA, AND THE SACIENT SPECIFICIATY OF THE GREEN AND THESE AND THE SELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN
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BY SIMILARITY.

C-LINKED (GLCANC...) (BY SIMILARITY).

C-LINKED (BY SIMILARITY).
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Best Local Similarity 81.4%; Pred. No. 4.3e-51;
Matches 114; Conservative 9; Mismatches 17; Indels 0; Gaps
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L.SHE_LUNAN
LSHE_LUNAN
LSHE_HUNAN
AC F01229;
DT 21-JUL-1986 (Rel. 01, Created)
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COLUMN COCCOSCORY.

BY SIMILARITY.

GOURT COCCOSCORY.
*Luteinizing hormone/chorionic gonadotropin bloactivity in the common marmoset (Callithix jacchus) is due to a chorionic gonadotropin molecule with a structure intermediate between human chorionic gonadotropin and human luteinizing hormone.*;

alol reprod :31:380-389(1995).

i. FUNCTION: STIMULATES THE OVARIES TO SYNTHESIZE THE STEROIDS THAT ARE ESSENTAL FOR THE MITTERANCE OF PRESONNEY.

1. SUBBUTT: HETEROIDIME OF A COMMON ALPHA CHAIN AND A UNIQUE BETA CHAIN WHITE CONFESS BIOLOCICAL SPECIFICITY TO THYROTROPIN, ELIPROPIN, PLACENTA.

1. SINGLITROPIN, POLLITROPIN AND GONADOTROPIN.

1. TISSUE SPECIFICITY: PLACENTA.

1. SHALLINITIME THE GLINGS TO THE GLINCOPROTEIN HORMONES BETA CHAIN FAMILY.
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LSHB_EQUBU
LSHB_EQUBU
LSHB_EQUBU
LSHB_EQUBU
STANDARD; PRT; 169 AA.

AC 046641;
BT 15-DEC-1998 (Rel. 37, Created)
DT 15-DEC-1998 (Rel. 31, Last sequence update)
DT 15-UPC-1998 (Rel. 38, Last annotation update)
DE Lutropin/chorlogonadotropin beta chain precursor (LSH-B/CG-B)
DE (Lutropin/chorlogonadotropin beta subunit).
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Interpo: IRRO03040; Cya_knot.
Interpo: IRRO03040; Cya_knot.
Interpo: IRR001405; Glyco_hormone_beta.
Fran. PRO0015; Cya_knot. 1.
FRINTS: FRO048; GrYSKNOT.
SWART: SWO0686; GHB. 1.
PROSITE: PS00056; GLYCO_HORMONE_BETA_1: 1.
PROSITE: PS00056; GLYCO_HORMONE_BETA_1: 1.
INTERPOSITE: PS00069; GLYCO_HORMONE_BETA_1: 1.
INTERPOSITE: 
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58 11
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146 14
151 11
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EMEL: X00264; CAA25067.1; EMEL: X00264; CAA25067.1; PRE: X01499; UTHUB.

EMEL: S71273, AAD14960.1; ALT_SEQ.

ELSP: POL233; IXUL.

ELSP: POL233; IXUL.

ELSP: POL233; IXUL.

ELSP: POL233; IXUL.

ELSP: POL233; IXUL.
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P51300.
01-0CT-1996 (Rel. 34, Created) .
01-0CT-1996 (Rel. 34, Last sequence update)
16-0CT-2010 (Rel. 40, Last annotation update)
16-0CT-2010 (Rel. 40, Last annotation update)
subunit) (CG-beta).
CGB
CGB
CGB
CALINITY Jacobus (Comnon marmoset).
Eukaryota, Metzaca, Chordata, Cranlata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Platyrrhini; Caliltrichidae;
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HEDLINE-9611SOLP PubMed-7492691;
Simula A.P. Amato F., Fasat R., Copata A., Berka J., Norman R.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q.
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BY SIMILARITY.

CFICACAR, COOLGAS.

C > R (IM RPCCONADISH; LACK OF RECEPTOR BINDING).

E > 0 (IN REF 2).

HISSING (IN REF 2).

HOLL > POH (IN REF 2).

HOLL > POH (IN REF 2).

HYS EATINGSSSILIBPO CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                Interport (PR00135); Cya_Knot.
Interport (PR00130); Cya_CyaKnot.
Interport (PR00130); Cya_CyaKnot.
Interport (PR00130); Cya_Chatot; 1.
PRINTS; PR001439; GFCYEKNOT.
PRNAT; SH00061; GHS (PROFER)
PR00118; PS00161; GLYCO_HRONOR_BETA_1; 1.
PR05118; PS001691; GLYCO_HRONOR_BETA_1; 1.
HOMOSTIE; PS001691; GLYCO_HRONOR_BETA_1; 1.
HOMOSTIE; PS001691; GLYCO_HRONOR_BETA_1; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          39 39 E E 76 MIS 132 135 HPC 141 AA; 15345 MW; E
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NCBI_TaxID-9483;
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CGHB_CALJA
AC CGHB_CA
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DISULFID
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CARBOHYD
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(Lutenizing hormone beta subunit).

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                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY SEQUENCE OF 105-169 FROM N.A.
Trissupe-placenta;
X MEDINE-90262614;
X MEDINE-90262614;
X MEDINE-90262614;
X MEDINE-90262614;
Display of the property of the proper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | H. STEP. POLIZI3; 1820.0.
| R. HISSP. POLIZI3; 1820.0.
| R. HIGHERPEN, 1FR0001305 Cys. knot.
| R. InterPen; 1FR0010015 Gg. Cys. knot.
| R. InterPen; 1FR0010015 Gg. Cys. knot.
| R. InterPen; 1FR0010015 Gg. Cys. knot.
| R. InterPen; 1FR001015 Gg. Cys. knot. 1.
| R. FRINTS; PR00001; Cys. knot. 1.
| R. PRINTS; PR00001; Cys. knot. 1.
| R. PROSITE; PS00068; GLYCO_HORNONE_BETA_1; 1.
| R. PROSITE; PS00068; GLYCO_HORNONE_BETA_2; 1.
| R. PROSITE; PS00068; GLYCO_HORNONE_BETA_2; 1.
| R. PROSITE; PS00068; GLYCO_HORNONE_BETA_2; 1.
| R. PRINTS; PS00068; GLYCO_HORNONE_BETA_2; T.
| R. PRINTS; T.
| R. PRINTS; PS00068; GLYCO_HORNONE_BETA_2; T.
| R. PRINTS; T
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59.6%; Score 463; DB 1; Length 169;
57.4%; Pred. No. 7.4e-36;
Live 16; Mismatches 39; Indels 8; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPL-----TCDD 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                            Equus asinus (Donkey).
Madrayota; Hetazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
NCBL_TARID9793;
                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
Chopineau M., Combarnous Y., Allen W.R., Stewart P.,
Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           114 PRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ЕМВL; X80116; CAAS6422.1; -.
EMBL; X53669; CAA37709.1; ALT_SEQ.
PIR; S15676; S15676.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 57.41
Matches 85; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
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UTROPIN/CHORIGORADOTROPIN BETA CHAIN.
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WHICH STATEMENTY.
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TISSUE-PILLIATY:
Chepineau M., Martinat N., Guillou F., Pourchet C.,
Submitted (Ann.1998) to the EMBL/GenBank/DobbJ databases.
- PRWCTION: PROMOTES PERPANTOSEREIS AND OULATION BY STIMULATING
- SUBMITT: HETERODINER OF A COMMON ALPHA CHAIN AND A UNIQUE BETA
CHAIN WHICH CONPERS BIOLOGICAL SPECIFICITY TO THYROTROPIN,
LUTROPIN, FOLLITROPIN AND GONALOTROPIN.
- SIMILARITY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match 61.3%; Score 476.5; DB 1; Length 169;
Best Local Similarity 62.4%; Pred. No. 4.38-37;
Matches 88; Conservative 15; Mismatches 33; Indels 5; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Equus burchelli (Plains zebra) (Equus quagga).
Mammalla: Eutheria: Chordata: Cranlata: Vertebrata: Euteleostomi;
Mammalla: Eutheria: Perissodactyla: Equidae; Equus.
WCBL_TAXID-9790;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
LSHE_EDGUAS STANDAED; PRT; 169 AA.

AC 19794;
DT 01-REP1991 (Rel. 17, Created)
DT 01-RVP1995 (Rel. 32, Last sequence update)
DT 15-UUL-1995 (Rel. 38, Last annotation update)
DF 15-UUL-1999 (Rel. 38, Last annotation update)
DE LAUTCOPIn/Chorlogonadotropin beta chain precursor (LSH-B/CG-B)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HESP. POL231; JANL.
INGEPTO: JERODOTS9; CYS.Knot.
INGEPTO: JERODOTS9; CYS.Knot.
INGEPTO: JERODOTS9; CYS.Knot.
Fram: PEODOT7; CyS.Knot.; J.
RIMTS: PEODOT7; CyS.Knot.; J.
RIMTS: PEODOE8; GHB. I.
RROSITE; PSOOGE8; GHB. I.
RROSITE; PSOOGE9; GLYCO, HORNONE, BETA_1; J.
ROSITE; PSOOGE9; GLYCO, HORNONE, BETA_1; J.
ROSITE; PSOOGE9; GLYCO, HORNONE, BETA_1; J.
ROSITE; PSOOGE9; GLYCO, HORNONE, BETA_1; J.
ROSINAL
CRAIN
21 169 UNTSOPIN/CHORIOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 SKAPP--PSLPSPSRLPGPSD 140
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169 AA; 17824 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; Y16265; CAA76146.1; -.
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DISULFID
CARBOHYD
CARBOHYD
SEQUENCE
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Euteleostomi;

169 AA.

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PPR: MICROHETERGEBEITY AT ASK-13 O-GLYCOSYLATION APPEARS TO BE
PROSESSIBLE FOR HEE BETA SUBUNIT CONTRIBUTION TO THE DIFFERENCE IN
LA RECEPTOR BIRDING ACTIVITY BETWEEN LSH B ND CG B.
SHILLARITY: BELYONG TO THE GLYCOPROTEIN HORMONES BETA CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PubMed=11131668;

Bousfield G.R., Butnev V.Y., Butnev V.Y.;

Boulstification of twalve 0-glycosylation sites in equine chorionic goadcropin beta and equine lutelnizing hormone beta by solid-phase Edmand egradation.;

Boll. Reprod. 61.36-147(2001).

1- reukTion: Records SPERMATOGENESIS AND OVULATION BY STIMULATING THE TESTES AND OVARIES TO SYMPHESIZE STEROIDS.

1- SUBMAT: HETERODIKEN OF A COMMON ALPHA CHAIN AND A UNIQUE BETA CHAIN WHICH COMPERS BIOLOGICAL SPECIFICITY TO THYROTROPIN, CHAIN WHICH COMPERS BIOLOGICAL SPECIFICITY TO THYROTROPIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. Procedic Chem. 1:263-280(1982).

[5]

REDIEM OF PRINCE OF CARBOHYDRATES.

REDIEM-90215864. PubMed-3211995,

Vilegenthart J.F.G.

Structure determination of the major N· and O·linked carbohydrate chains of the beta subunit from equine chorionic gonadotropin.;

Eur. J. Blochem. 189:175-183(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 21-169.

BODISTRESSTSOR'S PUBMEd-1298239; Ward D.N.;
BODISTGELG G.R., LLW W.-K., Sugino H., Ward D.N.;
Structural studies on equine 91ycoprotein hormones. Amino acid sequence of equine 1 utropin beta-subunit.";
J. Blol. Chem. 262:8610-8620(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 21-169.
MEDIARS-0755 PURMEd-1299238;
MEDIARS-0755 PURMEd-1299238;
SETUCLULA: BOURGIELD G.R., MOORE W.T. Jr., Ward D.N.;
STEUTCHLRAI STUDIES ON Equine 91ycoprotein hormones. Amino acid sequence of equine chorionic gonadotropin beta-subunit.";
J. BIOL. Chem. 262:8603-6609(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                          **SUBSICE FROM N.A. Debted=1379674;
Sherman G.B., Wolfe M.W., Parmerle T.A., Clay C.M.,
Threadglil D.S., Sharp D.C., Nilson J.H.;
A single gene encodes the beta-subunits of equine luteinizing hormone and chorionic gonadotropin.";
Well Endocrinol. 6:951-959(1992).
                                                        District 19134;

District 19134;

District 19134;

District 1913 (Rel. 16, Created)

District 1913 (Rel. 16, Last sequence update)

District 1913 (Rel. 16, Last annotation update)

Lutropin/Choriogonadotropin beta subunit)

(Lutenizing hormone beta subunit)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              [4]
PARTIAL SEQUENCE.
Ward D.N., Moore W.T. Jr., Burleigh B.D.;
"Structural studies on equine chorionic gonadotropin.";
J. Protein Chem. 1:263-280(1982).
                                                                                                                                                                                                                                                                                                          uus.
Equakayota, Wetazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
KCBI_TAXID-9796;
                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          [6]
O-GLYCOSYLATION.
LSHB_HORSE
ID LSHB_HORSE
                                                                                                            CC This SWILES PROV entry is copyright. It is produced through a collaboration between the Swiss Prov entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb.sib.ch/announce/or send an email to license@isb.sib.ch/.

EMBL: AF095716; AAC4196.1; --

CR EMBL: AF095716; AC4196.1; --

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TESTICE FROM N. B.

TESTICE FROM N. B.

TESTICE FROM N. B.

THOLECULAR CAPITY OF THE S., Verma G.M., Brown J.L.; the cDNA for the fellone
THOLECULAR CAPITY OF THE SETSICE FROM THE STREAM OF THE TESTICE ARD OVALIES TO SYMPHESIZE STREAM OF THE TESTICE AND OVALIES TO SYMPHESIZE STREAM OF THE STREAM OF 
                                                                       16-0CT-2001 (Rel. 40, Created)
16-0CT-2001 (Rel. 40, Last sequence update)
16-0CT-2001 (Rel. 40, Last annotation update)
Lutropin beta chain precursor (Luteinizing hormone beta subunit) (LSH-beta) (LSH-B) (LH-B).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23 SREPLRPLCRPINATLAAENEACPYCYTFTTICAGYCPSMMRVLPAALPPVPQPVCTYR 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                Felis silvestris catus (Cat).
Mankaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Manmalia; Eutheria; Carnivora; Fissipedia; Felidae; Felis.
NCBL_TaxiD-9665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (POTENTIAL).
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cive 13; Mismatches 23; Indels 0;
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LUTROPIN BETA CHAIN.

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Best Local Similarity 68.11
Matches 77; Conservative
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EMB.; MI0077, AAA30623.1; BMB.; MI3087.267.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EQUENCE FROM N.A.
MEDLINE-SEAD7729, PubMed-2987241;
MEDLINE-SEAD7729, Salver B.J., Thomason A.R., Nilson J.H.;
The gene for the beta subunit of bovine luteinizing hormone encodes
a gonadotropin mRMM with an unusually short 5-untranslated region.',
J. Blol. Chem. 260:7072-7077(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nourer R.A.;
Analysis of several bovine lutropin beta subunit cDNAs reveals
heterogeneity in nucleotide sequence.;
Biol. Chem. 260:4684-4687(1985).
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65.0%; Pred, No. 9.7e-34;
Live, 14; Mismatches 27; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILTID-CAR, 000044, MISSING (IN REF. 2). 0 - E (IN REF. 3). 0 -> 5 (IN REF. 3). 0 -> 5 (IN REF. 3). 0 -> 6 (IN REF. 3). 0 -> 6
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HSP: P01231 1XUL.
GIYCOSUITEDB: P04651; -
INTERPRO; IPR001359; Cys.knot.
INTERPRO; IPR001545; Cys.knot.
INTERPRO; IPR001545; GIYC.
INTERPRO; IPR001545; GIYC.
INTERPRO; IPR001545; GIYC.
INTERPRO; PR00439; GECYSKNOT.
SWART; SW00686; GHB.
PROSITE: P500686; GHB.
PROSITE: P500689; GIYCO_HORWONE_BETA_1; IPROSITE: P500689; GIYCO_HORWONE_BETA_2; INTERPROSITE: P500689
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE-85182575; PubMed-3838746;
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74 74 0
112 112 0
122 123 GP
126 126 0
                      Bovidae; Bovinae; Bos.
NCBI_TaxID-9913;
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Matches 76; Conserva
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01-3Av.1988 (Rel. 06, Last sequence update)
16-0CT-2001 (Rel. 106, Last annotation update)
16-0CT-2001 (Rel. 10, Last annotation update)
16-0CT-2001 (Rel. 40, Last annotation update)
16-0CT-2001 (Rel. 9)
16-0C
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                                                                                                                                                    EMBL, 541704, AAB22775.1;
PIR, A01503; KTHOB
PIR, A03304, A29304,
PIR, A49317, A41917,
RSP, PO1233, IMU.
GLYCOSALLEDB POBF51,
INCEPPO: IPRO02305, Cy2, Knot.
InterPro: IPRO02305, Cy2, Knot.
InterPro: IPRO02305, Cy2, Knot.
PETPRO: IPRO0305, Cy2, Knot.
PETPRO0305, Cy2, Knot.
PETPRO0307, Cy2, Knot.
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es 85; Conservat
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MEDIATE-9838233; PubMed-9722860;
Lind L.A., Sherman G.B.;
*Duplication of the southern white rhinoceros (Ceratotherium simum simum) luteinizing hormone beta subunit gene.*;
7. Mol. Endocrinol. 21:19-30(1999).
                                                                                                                                                                                                                                                       21 141 LUTROPIN BERT CHAIN.
29 77 BY SIMILARITY.
41 92 BY SIMILARITY.
46 190 BY SIMILARITY.
54 108 BY SIMILARITY.
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51 10 BY SIMILARITY.
51 AN 15277 MM, 50796F88832B93B¢ CRC64.
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Local Similarity 65.5%; Pred. No. 1.8e-33; Indels
Sa 74; Conservative 16; Mismatchea 23; Indels
PRINTS; PR00439; GFCYSKNOT.
SHART; SHOONG91 GHB.
PROSITE: PS00261; GLYCO_HORMONE_BETA_1; 1.
PROSITE: PS00669; GLYCO_HORMONE_BETA_2; 1.
HORMONE: S1gnal, Glycoprofein.
SIGNAL 1 141 LUTROPIN BETA
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SEQUENCE OF 7-141 FROM N.A.
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19 SEQUENCE OF 4-141 FRON N.A.

10 SEQUENCE OF 4-141 FRON N.A.

10 SEQUENCE OF 4-141 FRON N.A.

11 SETAIN-Wister immainful; ITSSEE-Anterior pituitary;

12 SETAIN-Wister in nucleotide sequences of rat glycoprotein hormone

12 SEQUENCE OF 5-12 SERVENCE SEGUENCES.

13 SEQUENCE OF 4-141 FRONTON N.A.

14 SEQUENCE SERVENCE SERVENCE SEGUENCES.

15 SEGUENCE OF A COMPON ALPHA CHAIN AND A UNIQUE BETA

16 CHAIN WHICH CONFERS BIOLOGICAL SPECIFICITY TO THYROTROPIN,

17 SEGUENCE OF A COMPON ALPHA CHAIN AND A UNIQUE BETA

18 SEGUENCE OF A COMPON ALPHA CHAIN AND A UNIQUE BETA

19 SEGUENCE OF A COMPON ALPHA CHAIN AND A UNIQUE BETA

10 SEGUENCE OF A COMPON ALPHA CHAIN AND A UNIQUE BETA

10 SEGUENCE OF A COMPON ALPHA CHAIN AND A UNIQUE BETA

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18 SEGUENCE OF A COMPON ALPHA CHAIN AND A UNIQUE BETA CHAI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-371-1996 (Rel. 01, Created)
21-371-1996 (Rel. 01, Last sequence update)
16-607-2001 (Rel. 40, Last amnotation update)
16-607-2001 (Rel. 40, Last amnotation update)
16-607-1001 (Rel. 40)
1007-1001 beta chain precursor (Luteinizing hormone beta subunit) (LSH-
Deca) (LSH-) (H-9).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus norvegicus (Rat).
Bukaryota Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;
Ammaniaia, Eutentia; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBL_TRAID=10116;
                                            *Nucleotide sequence of the cDNA encoding the precursor of the beta subunit of rat lutropin.; Proc. Natl. Acad. Sci. U.S.A. 80:4649-4653(1983).
                                                                                                                                                                                                           62 DVRFESIRLEGCERGVNPVVSTAVALSCOCALCRRSTTDCGGPKDHPLTCDDPRFQD 118
=11 | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 1
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MEDIAR—85080043; PubMed-6096374;
Jameson L., Chin W.W. Hollenberg A.N., Chang A.S., Habener J.F.;
Jameson L., Chin W.W., Hollenberg A.N., Chang A.S., Habener J.F.;
Arbe gene encoding the beta-submit of rat liternizing hormone.
Analysis of gene structure and evolution of nucleotide sequence.";
J. Biol. Infem. 259:15474-15480(1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PEDURNCE FROM N.A.
STRAIM-SPRAGUE-DANLEY;
MEDLINE-83273673; PubMed-6192440;
CAIM W.W. Goddine J.E., Klein D.R., Chang A.S., Tan L.K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT; 141 AA.
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InterPro: IPR000359; Cys_knot.
InterPro: IPR00340; GE_Cysknot.
InterPro: IPR001545; Glyco_Lormone_beta.
Pfam; PF00007; Cys_Knot; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
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CC This STATE PROT entry is copyright. It is produced through a collaboration between the Swiss Ford entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute of the European Swissing on the Swiss by non-profit institutions as long as its content is in no way conditions a late of the Swissing of 
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                     bovies and porches speciess.

1. SHOWITION: PROMOTES SPERMANOGENESIS AND OWULATION BY STIMULATING
1. FUNCTION: PROMOTES SPERMANOGENESIS AND OWULATION BY STIMULATING
1. THE TESTES AND OVARIES TO STRATESIES SPERDIS.
1. SUBBUILT: HETRODIMES OF A COMMON ALPHA CHAIN AND A UNIQUE BETA
CHAIN WHICH CONFESS BIOLOGICAL SPECIFICITY TO THYROTROPIN.
1. STIMILARITY: BELONGS TO THE GLYCOPROPEIN HORMONES BETA CHAIN
FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
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01-807-1990 (Rel. 16, Last asquence update)
15-007-2001 (Rel. 10, Last amoration update)
Letropin beta chain precursor (Luteinizing hormone beta subunit) (LSH-beta) (LSH-beta) (LSH-beta) (LSH-beta)
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MEDILINES 89306142; PubMed-2744222;
KELO Y., HIRLS T.;
"Cloning and DNA sequence analysis of the CDNA for the precursor of
porcline lutefalisting hormone (LM) beta subunit.";
MOL. Cell. Endocrinol. 62:47-53(1989).
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**Exabit T.** Hirat T.** Kato T.**, Wakabayashi K., Kato Y.;
**The gene for the beta subunit of porcine LH: clusters of GC boxes and CACCC elements.**
**J. Mol. Endocrinol. 5:137-146(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BY SIMILABITY.

LUTROPIN BETA GRAIN.

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Madkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
MCB__Taxilo=8823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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send an email to licenseelisb-sib.ch).
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                                                                                                                   EMBL; AF024521; AAC36049.1; -. EMBL; AF024520; AAC36048.1; -.
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14930 MW;
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2 SKEPLAPRCRPINATIAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
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SEQUENCE A TISSUE-Anterior pituitary;

Brown P. Brook 2.4 KNEALITY J.R. MCHELITY A.S.;

Brown P. Brook 2.4 KNEALITY J.R. MCHELITY A.S.;

Brown P. Brook 2.5 KNEALITY A.S. MCHELITY;

SUBMITT: ARTEROFIES AND OVARIES TO SYNTHESIES TREADINS.

-1- SIBURIT: HATEROFIES B. OS A COMMON ALPHA CHAIN AND A UNIQUE BETA CHAIN WHICH COMPANY BELONGS B. DOLOGICAL. SPECIFICITY TO THYROTROPIN, LUTROPIN, FOLLITROPIN AND GONADOTROPIN GONADOTROPIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-129/SV;
MEDLINE-56125216; PubMed-8543188;
MEDLINE-56125216; PubMed-8543188;
"Cloning of the mouse gonadotropin beta-subunit-encoding genes, II.
Structure of the luteinizing hormone beta-subunit-encoding genes.";
Gene 166:333-336(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (Mouse).
Rikaryota; Metazoa: Chordata; Craniata; Vertebrata; Buteleostoml;
Mommalia; Eutheria; Rodentia; Sclurognathl; Muridae; Musinee; Mus.
NCBL_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                               N-LINKED (GLCNAC...).
/FILG-CAR_O00046.
/FILG-CAR_O00046.
ISSING (IN SOME MOLECULES).
0 -> E (IN REF. 4).
R -> Q (IN REF. 1).
E -> Q (IN REF. 4).
E -> Q (IN REF. 4).
Q -> PG (IN REF. 4).
Q -> PG (IN REF. 3 AND 4).
Q -> E (IN REF. 3 AND 4).
Q -> E (IN REF. 3 AND 4).
W; C$9EC7COA$5$9DC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      55.2%; Score 429; DB 1; Length 141 64.1%; Pred. No. 8e-33; Live 14; Mismatches 28; Indels
                                                                                                                                                                                                   LUTROPIN BETA CHAIN.
BY SIMILARITY.
PEAM: PPO00007; Cya_knot; 1.
PRINCIPE: PRO0586; GFRSTNOT.
PROSTE: PRO0686; GHR.1.
PROSTE: PRO0686; GHR.1.
HOTMONO: Signal: GLYCO_HORNONE_BETA_1; 1.
HOTMONO: Signal: GLYCO_HORNONE_BETA_2; 1.
HOTMONO: Signal: GLYCO_HORNONE_BETA_2; 1.
HOTMONO: Signal: GLYCO_HORNONE_BETA_2; 1.
DISULEID 11 140 LUTROPIN BETA CHI DISULEID 29 77 BY SIMILARITY.
DISULEID 54 106 BY SIMILARITY.
DISULEID 54 106 BY SIMILARITY.
DISULEID 58 110 BY SIMILARITY.
DISULEID 58 110 BY SIMILARITY.
DISULEID 13 120 BY COCKED
CARBOHYD 33 33 NFLIRED COUNTY.
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30 0 0
59 L
63 R
72 PM
81 E
123 GP
126 MW;
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Best Local Similarity 64
Matches 75; Conservativ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             138 1
30 59
63 71
71 81
122 1
126 1
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SEQUENCE FROM N.A.
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CONFLICT
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EMEL: SS4695; AMB2181.1:

EMEL: XS2488; CAA36729.1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESTRUCTURE OF CARBOHYDRATE.

NEDLINE-1906100, Dubmed-2009620,

NEDLINE-1906100, Dubmed-2009620,

NEDLINE-1906100, Dubmed-2009620,

Site-specific N-glycosylation of owine lutropin. Structural analysis of site-specific N-glycosylation of owine lutropin. Structural analysis of site-specific N-glycosylation of owine lutropin. Structural analysis of site-specific N-glycosylation of owine specific N-glycosylation of owine specific N-glycosylation of the program of the pro
                                                                                                                                                                                                                                                                                        SEQUENCE PROM N.A.
TISSUED-FLULIARY.

WEDLINE-POLIAGE,
D'Angelo-Bernard G., Moumal W., Julisz M., Counis R.;
Cloning and sequence analysis of the cDNA for the precursor of the beta subunit of ovine luteinizing hormone.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEGURACE OF 21.139.
MEDILNE-72211145; PubMed-4556399;
Liu W.-K. Nahm H.S. Sweeney C.M.; Holcomb G.N.; Ward D.N.;
The primary structure of ovie tubenhizing bornone. III. The amino acid sequence of the reduced. S.carboxymethylated A-subunit (LH-
Eukaryota; Metazoa; Chordata; Graniata; Vertebrata; Euteleostomi;
Mommalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoldea;
WGBLTARIDES; Caprinae; Ovis.
                                                                                                                                                                      MEDLINE-933517422: PubMed-8349025;

Toron P., Wolley W., Wallace R.M., McNeilly A.S., Clark A.J.;
Characterization of the owine libeta-subunit gene: the promoter
Characterization of the owine libeta-subunit gene: the promoter
Characterization of the owine libeta-subunit gene: the promoter
Characterization of the promoter of the prom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 21-139.
MEDLINE-3190035; PubMed-4575435;
Salram M.R., Samy T.S.A., Pephoff H., Li C.H.;
Salram y structure of owine interstitial cell-stimulating hormone. II. The beta-subunit.
Arch. Blochem. Blophys. 153:572-586(1972).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY ASSIGNMENT OF DISULFIDE BONDS.

MEDGLER-7666B152; Pubmed-1201911;

Chung D., Salram M.R., Li C.H.;

"The primary structure of ovine interstitial cell stimulating hormone. IV: Disulfide bridges of the beta subunit.";

Int., Pept. Protein Res. 7:487-493(1975).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PIR: A01500; UTSHB.
PIR: S09232; S09232
HSSP: p01231; S10232
GlycoSuiteDB; P01231; Tuff.
GlycoSuiteDB; P01231; Cycknot.
InterPro; IPR0012400; GF_Cycknot.
InterPro; IPR001545; Glyco_hormone_beta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      beta).";
J. Biol. Chem. 247:4365-4381(1972).
                                                                                                                                                   SEQUENCE FROM N.A.
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0; Gaps

STITITION ...

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RECORDED J.V. Merzlyak I.Y., Horton T.H., Turek F.W.;

Bernard D.J. Merzlyak I.Y., Horton T.H., Turek F.W.;

RECORDED J.V. Merzlyak I.Y., Horton T.H., Turek T. M. Merzlyak I.Y., Turek TERROLHER OF A COMPON ALD STREAM ONLINGUE BETA CHAIN WHICH COMPERS BIOLOGICAL SPECIFICITY TO THROTHOPIN, CH. LUTROPIN AND CONNOCROPIN, LUTROPIN AND CONNOCROPIN.

C SHILLARITY: BELONGS TO THE GLYCOPROFIEIN HORNORS BETA CHAIN

C FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 SKGPLRPLCRPINATLAAENEACPVCITFTTTICAGYCPSMVRVLPAALPPVPQPVCTYH 77
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                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR001559; Cys_knot.
InterPro; IPR001545; Glyco_hormone_beta.
Pfam: PF00077; Cys_knot; 1.
PR051TE; PS00054; GLYCO_HORNONE_BETA_1; 1.
PR051TE; PS000689; GLYCO_HORNONE_BETA_2; 1.
HORTONE; S1gnal; Glycoprotein.
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74; Conservative
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                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the SVIS institute of Bloinformatics and the EMBL outsein or the European Bloinformatics institute. There are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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P18842.
01-NOV-1990 (Rel. 16, Last sequence update)
16-OCT-2001 (Rel. 14) Last amontation update)
16-OCT-2001 (Rel. 14) Last amontation update)
Lutroph beta chain precursor (Luteinizing hormone beta subunit) (LSH-beta) (LSH-B) (LH-B) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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LUTROTH BETA CHAIN.
BY SIMILARITY
A -> R (IN REF 2). (POTENTIAL).
A -> R (IN REF 2).
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Canals familiaris (Dog).

Edatas familiaris (Dog).

Karyota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

NCBL_TaxID-9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              *Match 54.7%; Score 425; DB 1; Length 141; Local Similarity 63.7%; Pred No. 1.9e-32; Local Secretive 16; Mismatches 25; Indels 0; Cs 72; Conservative 16; Mismatches 25; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 DVRFESIRLPGCPRGVNPVVSYAVALSCOCALCRRSTTDCGGPKDHPLTCDDP 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81 ELAFASVRLPGCPPGVDPIVSFPVALSCRCGPCRLSSSDCGGPRTQPMACDLP 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                      MGD: MCI:96782 LLb.
InterPro; PR000159; Cys_knot.
InterPro; IRR00159; Clyc_hormone_beta.
Pfan: PF00107; Cys_knot: 1.
PROSITE: PS00069; CHB: 1.
PROSITE: PS00069; CHCC_HORNONE_BETA_1: 1.
PROSITE: PS00689; CLYCC_HORNONE_BETA_2: 1.
HORMONE: SIgnal; Clycoprotein.
SIGNAL
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CARBOHYD
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15HB_CANFA
10 ESBB_C
11 NOV
10 10 NOV
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Gaps

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64 FASIRLPGCPPGVBPWVSFPVALSCHGGPCRLSSSBCGPGRAZPLACB------RS 113
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                                                                                                                                                                                                                                                                                                                                                                                               52.4%; Score 407; DB 1; Length 118; 56.0%; Pred. No. 7e-31; tive 18; Mismatches 27; Indels 10; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5 PLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVR 64
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*Lucelining hormone of the sperm whale. Amino acid sequences of

*Lucelining hormone of the sperm whale.

*Lucelining to arboxymethylated beta subbunits.';

Blockhamia 49:1004-108(1984)

*ER TESTES ROW OVARIES TO SYMPHESIES TERROIDS.

-IFE TESTES AND OVARIES TO SYMPHESIES TERROIDS.

-ISTBUNIT: HETEROINER OF A COMMON ALPHA CHAIN AND A UNIQUE BETA CHAIN HILCH CONNERS BIOLOGICAL SPECIFICITY TO THYROTROPIN,

-ILTROPIN, FOLLITROPIN AND GONNOTROPIN HORMONES BETA CHAIN

-I- STHILARITY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-4647-1992 (Rel. 12, Created)
16-607-1992 (Rel. 12, Last sequence update)
16-607-1910 (Rel. 40, Last annotation update)
16-1910 been chain (Luteinizing hormone beta subunit) (LSH-beta)
(LSH-B) (LH-B).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   yyster catodon (Sperm whale) (Physeter macrocephalus).
Elkaryota: Metazoa: Chordata: Ctanlata; Vertebrata: Euteleostoml;
Hammalia: Putheria: Cetartiodactyla; Getacea; Odontocett;
Nystecridae; Physeter.
NCBI_TaxIN-9755;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   [1]
WEDLINE-87033654; PubMed-3771098;
PERMON T.A., Karasyow V.S.;
*Primary structure of sperm whale luteinizing hormone.";
*Primary structure of sperm whale luteinizing hormone.";
Int. J. Pept. Protein Res. 28:124-129(1986).
                                                                                                                                                                                                 BY SIMILARITY
N-LINED (GLCNAC. .).
PRT; 118 AA.
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HSSP; P01233; 1XUL.
InterPro; IPR000359; Cys_knot.
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AC 72530.00

TO 11-MAY-1992 (
DT 11-MAY-1992 (
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Best Local S
Matches 70
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     This SMISS-PROT entry is copyright. It is produced through a collaboration between the SMIss Institute of Bioinformatics and the BMES outstitute of Bioinformatics and the BMES outstitute. There are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to licenseefish-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 SKEPLRPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-0CT-1993 (Rel. 27, Created)
01-0CT-1993 (Rel. 27, Last sequence update)
10-0CT-1993 (Rel. 27, Last sequence update)
Lutropin Deta chain (Luteinizing hormone beta subunit) (LSH-beta)
(LSH-B) (LH-B).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   blasenoptera acutorostrata (Minke whale) (Lesser rorqual).

Bikaryota Wetazoa: Clordata: Cradata: Wertebrata: Euteleostomi;

Hammalia: Butheria: Cetartiodactyla; Cetacea: Mysticeti;

Malaenopteridae: Balaenoptera.

Weal_rax/Porferi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 52.6%; Score 409; DB 1; Length 128; 63.9%; Pred. No. 5e-31; Indels iive 16; Mismatches 23; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13660 MW; BBF9F655E8E08625 CRC64;
                                                                                                                                                                               EMBL; AF106915; AAF15966.1; -. HSSP; P01233; 1XUL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 52.6%
Best Local Similarity 63.9%
Matches 69; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    128 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PIR; PN0139; PN0139.
HSSP; P01233; 1XUL.
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LSHE_TRIVE STANDARD; PRT; 141 AA.

046482.

16-027-2001 (Rel. 40, Created)

16-027-2001 (Rel. 40, Last sequence update)

16-027-2001 (Rel. 40, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22 PLRPLCRPTNATLAAESDACPVCVTFTTICAGYCPSW/RVLPAALPPSPQLVCTYRELS 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5 PLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVR 64
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27 75 BY STRILARITY.
41 90 BY SINTLARITY.
44 120 BY SINTLARITY.
52 106 BY SINTLARITY.
54 100 BY SINTLARITY.
11 118 BY SINTLARITY.
11 118 AY SINTLARITY.
14 699 MM; 2460139360BRA7B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51.7%; Score 402; DB 1; Length 138; 62.7%; Pred. No. 2.3e-30; ive 11; Mismatches 30; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSSP, P01233. IXUL
Interpro: JPR000359. Cys_knot.
Interpro: JPR0010359. Cys_knot.
Fram. PP00007. Cys_knot. 1.
FRAMT: SNOTOGES. GIVCO. HORNONE_BETA_1; 1.
FROSITE: PS00068; GHB. 1.
HORNONE_BETA_2; 1.
HORNONE_BETA_2; 1.
STANDERS SIGNAL STANDERS STA_2; 1.
STANDERS SIGNAL STANDERS SIGNAL SIGNA
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as 69; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
DISULFID
DISULFID
CARBOHYD
SEQUENCE
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Best Local S:
Matches 69;
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16-00T-2001 (Rel. 19, Last sequence update)
16-00T-2001 (Rel. 40, Last amnotation update)
Lutropin beta chain procursor (Luceinizing hormone beta subunit) (LSH-
bera (LSH-9) (HF-9) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52.3%; Score 406; DB 1; Length 118;
57.6%; Pred. No. 8.6e-31;
ive 15; Mismatches 28; Indels 10; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5 PLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVR 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genome 9:688-642(1998).

GENOME 9:688-642(1998).

THE TESTES AND OVULATION BY STIMULATING THE TESTES AND OVULATION BY STIMULATING THE TESTES AND OVULATION BY STIMULATING THE TESTES AND OVULATION OF A COMMON ALPHA CHAIR AND A UNIQUE BETA CHAIN WHICH COMPERS BILOKOSTIAL PRECIPICITY TO THYROPIN, LUTROPIN, FOLLITROPIN AND GONADOTROPIN.

SIMILARITY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #TISSUE-PILLIEATY,
HINESURE-PILLIEATY,
BARTISON G.A., Deane E.M., Cooper D.M.;
CDNA Cloning of luceinizing hormone subunits from brushtail possum
and read kangaroo,;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Macropus rufus (Red kangaroo) (Megaleia rufa).
Eukaryota: Metazoa: Chordata; Craniata: Vertebrata; Euteleostomi;
Mammalia: Metatherla; Diprotodontla; Macropodidae: Macropus.
(1)
                                                                                                                                                             PROSITE; PSOOSE1; GLYCC_HORMONE_BETA_1; 1.

PROSITE; PSOOSE1; GLYCC_HORMONE_BETA_2; 1.

HORMONE; ClyCoprotein.

BISGUERD 26 17 8 SIMILARITY.

DISGUERD 26 110 BY SIMILARITY.

DISGUERD 34 88 BY SIMILARITY.

DISGUERD 38 90 BY SIMILARITY.

DISGUERD 93 100 BY SIMILARITY.

CARBOURD 31 10 BY SIMILARITY.

CARBOURD 31 13 N-LIMED (GLANC...).

SEQUENCE 118 AA: 12412 MW; 81177A55382F1SE7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT; 138 AA.
InterPro: IPR00240; GF_cysknot.
InterPro: IPR001545; Glyco_hormone_beta.
Plan: PP00007; cys_knot; 1.
PRINTS: PR004181; CSPTSKNOT.
SMATT: SW00168; GHB: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AF017450; AAC96021.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 57.6 es 72; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OLIVORDOCENIA.

140 GONADACTROPIN BETA-II CHAIN.

17 BY SIMILARITY.

130 BY SIMILARITY.

130 BY SIMILARITY.

140 BY SIMILARITY.

150 BY SIMILARITY.

170 BY SIMILARITY.

180 BY SIMILARITY.

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181 BY SIMILARITY.

181 NAI. REB663562979ADAR CRC64;
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MEDLINE-092139: PubMed-1216480;
MEDLINE-092139: PubMed -12.4. Huang C.-J., Huang C.-J., Huang C.-J., Huang C.-C., Lo. T.-B.,
Primary structures of carp gonadotropin subunits deduced from CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-71.1966 (Rel. 01, Created)
21-71.1966 (Rel. 01, Created)
31-71.1966 (Rel. 01, Last sequence update)
31-71.1967 (Rel. 12, Last sequence update)
31-71.1967 (Rel. 140, Last annotation update)
31-71.1967 (Rel. 140, Last annotation update)
31-71.1967 (Greated)
31
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WINDLINE-78124308 PUNME-6070931.

JOLIES J. BUTZARA-GEREAGE E., FONTAINE Y.-A., JOLIES P.;

The evolution of gonadotropins: some molecular data concerning a form manmallan pituitary gonadotropin, the hormone from a teleost fish (Cyptins cappio L.).;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     39.0%; Score 303; DB 1; Length 140; 54.3%; Pred. No. 2.8e-21; Live 16; Mismatches 27; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
Chang Y.S., Huang P.-L., LO T.-B.;
Submitted (#NT-1991) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleotide sequences.";
Int. J. Pept. Protein Res. 32:556-564(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             144 AA.
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INTERPROJ. IRROGASOS, CYS.LKDOT.

INTERPROJ. IRROGASOS, CE.CYSKIDCT.

INTERPROJ. IRROGASOS, CE.CYSKIDCT.

PERMITS, PROGASOS, CETCYSKOT.

PRARTYS, PROGOSS, GENEY, INTERPROSETE, PROGOSS, GENEY, COMPRONE, BETA.1; 1.

PROSETE, PSOGOSS, GLYCO, HORMONE, BETA.1; 1.

SIGNAL, HOTMONE, GLYCO, HORMONE, BETA.2; 1.

SIGNAL, HOTMONE, GLYCO, HORMONE, BETA.2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                    EMBL; D88024; BAA13531.1; *.
EMBL; AB015596; BAA86658.1;
HSSP; P01233; IXUL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 Similarity 54.3%;
51; Conservative
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07H2_CPCA

AC 07H2_CPCA

AC 11-01L-1986

DT 21-01L-1986

DT 10-07T-1992

DT 16-07T-2001

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Matches 51
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26 LRPLCRPINATLAAESDACPVCVTFTTICAGYCPSMYRVLPAALPPGPQLVCTYRELSF 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                         US0845:101 (Rel. 40, Created)
16-OCT-2010 (Rel. 40, Last sequence update)
16-OCT-2010 (Rel. 40, Last sequence update)
Gonadotropin beta-11 chain precursor (GTH-II-beta) (Luteinizing
hormone-like GTH).
Eukaryotta Refaxos. (Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygil; Reopterygil; Teleostei; Euteleostei; Ostariophysi;
(SPLINIcomes; Cyptinidae; Carasslus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-PILILIARY;
WEDLINE-9744866; PUNMed-9073500;
VOSBIURA T., KOBSPASHI M., KALO K., AIda K.;
"Molecular clonding of the Cobra encoding two genadotropin beta "Molecular clonding of the Cobra encoding two genadotropin beta subunits (GTH-1 beta and -11 beta) from the goldfish, corassius
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Score 393; DB 1; Length 141;
1; Pred. No. 1.6e-29;
11; Mismatches 30; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       66 ESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDP 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              86 SSIRLPGCPPGVDPIFSFPVALSCSCGGCRLSHSDCGGPRARPHLCTRP 134
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                                                                                                                                                           InterPro; IPR001559; cyg_knot.
PinterPro; IPR001555; diyo_hormone_beta.
Pfan; PF00007; cyg_knot; 1.
PROSTE; PS000561; GIRJ.
PROSITE; PS000561; GIRZO_HORMONE_BETA_1; 1.
PROSITE; PS00689; GLXCO_HORMONE_BETA_2; 1.
FROSITE; PS00689; GLXCO_HORMONE_BETA_2; 1.
SIGNAL.
1 22 BN SIMILARITY.
or send an email to licenseelsb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                         EMBL; AF017448; AAC96019.1; -. EMBL; AF090388; AAC63526.1; -.
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GTH2_CARAU
ID GTH2_CARAU
AC 098849;
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Best Local S
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Chang Y.S., Buang C.J., Huang F.-L., Liu C.S., Lo T.-B.;

The Purlification, characteration, and molecular clouing of
gonadoctopin subunits of sluver carp (Hypophthalmichthys molitrix).';

AL Gen. Comp. Endocrinol. 78,23-31(1990).

C. I. SUBURIT: ENDOCRIDE IN GAMETOGENESIS AND STEROIDOCENEIS.

C. I. SUBURIT: HETEROIDHER OF AN ALPHA AND A BETA CHAIN

C. I. SUBURIT: HETEROIDHER OF AN ALPHA AND A BETA CHAIN

C. I. SHILLARIY: BELONGS TO THE GLYCOPROTEIN HORNONES BETA CHAIN

C. I. SHILLARIY: BELONGS TO THE GLYCOPROTEIN HORNONES BETA CHAIN

R. PRAILS: PRO0265, 186056, 1870-18.

R. InterPor: IPRO02405; GF_CYSKNOT.

R. InterPor: IPRO02405; GF_CYSKNOT.

R. InterPor: IPRO02405; GF_CYSKNOT.

R. PRATTS: PRO0443: GLYCO-LORMONE_BETA_1; 1.

R. PROSITE: PRO0169; GLYCO-HORNONE_BETA_2; 1.

R. HORNORES: PROOFES: GLYCO-HORNONE_BETA_2; 1.

R. PROSITE: PROOFES: GLYCO-HORNONE_BETA_2; 1.

R. HOLDONE GLYCO-HORNONE_BETA_2; 1.

R. HOLDONE GLYCO-LORMONE_BETA_2; 1.
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01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last sequence update)
01-JUL-1993 (Rel. 10, Last sequence update)
01-OCT-2001 (Rel. 10, Last sequence update)
03-Mondotropin beta-11 Chain precursor (GTR-II-beta) (Luteinizing thormone-11ke GTH) (Fragment).
Eukaryota: Metacos, Chordata: Craniata; Vertebrata: Euteleostemi; Actinoptery911; Neoptery911; Teleostei; Euteleostei; Ostarlophysi; Oprillomes; Cyprillidae; Ctenopharyngodon.
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ISSUE-PILLILARY;
Thang Y.S., Huang F.-L., Lo T.-B.;
SUDMITTER (JUL-1991) to the EMBL/Genank/DDBJ databases.
SUDMITTER (JUL-1991) to the EMBL/Gense of the STREATH (JUL-1991) to LOWER OF ALCHER AND STEROIDGENSIS.
-I. SUNGINIT: HETEROIDERS OF AN EATH AND A BETA CHAIN.
-I. SUBUNIT: HETEROIDERS OF AN ELYCOPROTEIN HORMONES BETA CHAIN.
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140 141 BY
30 78 BY
47 131 BY
55 109 BY
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114 121 BY
14 121 BY
14 14 AA; 15856 MA; AI
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TOTAL_CTRID
AC 979094.
TO 0.-707-1993 - OF 10-707-1993 - OF 10-7
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OFFILE HERMON STANDARD; PRF; 141 AA.

OFFILE HERMON STANDARD; PRF; 141 AA.

AC 57472.

OFFILE HERMON STANDARD; PRF; 141 AA.

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             Biochimie 59:893-894(1977).

-- FUNCTION: INVOLVED IN GAMETOGENESIS AND STEROIDOGENSIS.

-- STORMATT: HETERODIMER OF AN ALPHA AND A BETA CHAIN.

-- SIMILARITY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN.

FAMILY.
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PROSITE; PSO0261; GLYCO_HORMONE_BETA_1; 1.
PROSITE; PSO0689; GLYCO_HORMONE_BETA_2; 1.
HORMONE; GlyCoprotein; Signal.
27
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1 PSKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNY 60
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BY SINILARITY.
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29 77 BY SINTLARITY.
43 92 BY SINTLARITY.
46 130 BY SINTLARITY.
54 108 BY SINTLARITY.
13 120 BY SINTLARITY.
13 3 10 N-LINED (GLCNAC. . . ).
73 73 73 7 7 - 1.
86 86 7 - 8 K.
142 AA, 15872 MF, EJIEII7DA235C486 CRC64;
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Job time : 26 secs
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Best Local Similarity 50.5
Matches 51; Conservative
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          entities requires a license agreement (See http://www.lsb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                          11)
PEDCHNE-FROM N.A.
HEDLINE-90046819, PubMed-2813416;
Sekine S., Saito A., Itoh H., Kawaµchi H., Itoh S.;
Molecular cloning and sequence analysis of chum salmon gonadotropin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
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MEDLIKE-80953031; PubMed-3192067;

TICON H., SARAUCH H.;

"THE complete amino acid sequences of beta-subunits of two distinct cham salmon griffs."

Gen. Comp. Endocrinol. 71:438-454(1988).

"THE SUBDATE HETEROLIKE OF AN ALPHA AND A BETA CHAIN."

SIMILARITY: BELONGS TO THE GLYCOPROTEIN HORNORES BETA CHAIN.
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01-MAR-1989 (Rel. 11, Last sequence update)
01-MAR-1989 (Rel. 11, Last sequence update)
05-GCT-2010 (Rel. 14, Last annocation update)
05-GCT-2010 (Rel. 16, Last annocation update)
05-GCT-2010 Reta (Chus as annocation update)
05-GCT-2010 Reta (Chus ashaon)
05-GCT-2011 Retacos: Chordata (Crantata; Vertebrata; Euteleostomi;
05-GCT-2011 Repterygli; Releoste; Euteleostemi;
05-GCT-2010 Retacos: Chordata (Crantata)
05-G
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TISSUE-EMBRIONIC TROPHOBLAST;

PECURENCE FROM N.A.

TISSUE-EMBRIONIC TROPHOBLAST;

ALGOMALISON Of Chorionic GondOtropin Expression by Human and
The Acomparison of Chorionic GondOtropin Expression by Human and
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01-JUN-2001 (TERBLEEL. 17, Last sequence update)
01-JUN-2001 (TERBLEEL. 19, Last annotation update)
CERRIONIC COMMOTROPIN BETA SUBUNIT 2.
BURACOA ESACLOWIATIS (CERB eating macaque) (Cynomolgus monkey).
BURACOA ESACOA CHORdata, Craniata, Vertebrata, Buteleostomi, Mammalia, Eutherlas, Primates; Catarrhini; Cercopithecidae;
CECCOPILIBELINES, MACAGA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT; 165 AA
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1 PSKRPLRPRCRPINATLAVE.....SKAPPPSLPSPSRLPGPSDT 141
                   GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd
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Maximum Match 100%
Listing first 50 summaries
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Gapop 10.0 , Gapext 0.5
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_vertebrate:*
_unclassified:*
_rvirus:*
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Query Match 81.2%; Score 631; DB 6; Length 165; Best Local Similarity 82.7%; Pred. No. 2.4e-6.7 Metches 115; Conservative 7; Mismatches 17; Indels Metches 115; Conservative 7; Mismatches 17; Indels

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Description

Length DB

us-09-813-398-3.default.rspt

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The SEQUENCE FROM N.A.

TO SPECIES-RABDIL;

TO SPECIES-RABDIL;

The Limunuar responses and anti-fertility effect in rabbits induced by the Lamunuarion."

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C. STRAIN-BAID-C; TISSUE-PLACENTA;

C. STRAIN-BAID-C; TISSUE-PLACENTA;

C. A STRAIN-BAID-C; TISSUE-PLACENTA;

The first of the subunit glycoprocein (rmCob) using DNA immunization.*;

The gondout-Dph b-subunit glycoprocein (rmCob) using DNA immunization.*;

The submitted (JAN-2001) to the RelL/Genbank/DDBJ databases.

RESP, PO123: JAN.

PRESP, PO124: JAN.

PRESP, PO125: PO126: JAN.

PRESP, PO125: PO126: JAN.

PRESP, PO125: PO126: JAN.

PRESP, PO125: PO126: JAN.

PRESP, PO126: JAN.

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099148 DATUM-2001 (TERGILAE, 17, CTEATED)
01-JUN-2001 (TERGILAE, 17, Last sequence update)
01-JUN-2001 (TERGILAE, 19, Last annotation update)
CHORIONIC GONADOTROPIN BETA-SUBUNIT GLYCOPROTEIN.
MUS musicalia (House).
Eukaryota; Metazoa; Chordaea; Craniata; Vertebrata; Euteleostomi;
MCHI_TANID-10090;
MCHI_TANID-10090;
                                                                                                                                                                                     Chen T., Peng J.P., Wang B.;
J'dentification of beta subunit of the rhesus monkey chorionic
gonadotropin (recol.):
Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      79.3%; Score 616; DB 11; Length 165;
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            NCBI_TaxID=9544, 9986;
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109GLJ70:
101-MAR-2001 (TERBLICE1.16, Created)
101-MAR-2001 (TERBLICE1.16, Last sequence update)
101-DEC-2001 (TERBLICE1.19; Last sequence update)
101-DEC-2001 (TERBLICE1.19; Last annotation update)
101-DEC-2001 (TERBLICE1.19; Last annotation update)
107FCCOlagua cuniculus (Rabolt).
107FCCOlagua cuniculus (Rabolt).
108Maryota; Metacoa; Chordata; Craniata; Vertebrata; Euteleostoml;
108Marmalla; Priberia; Primates; Catarrhini; Cercopithecidae;
108CECOpithecinae; Macaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09EEH;
01-70N-2001 (TERBELEE1. 17, Created)
01-70N-2001 (TERBELEE1. 17, Last sequence update)
01-50N-2001 (TERBELEE1. 17, Last sequence update)
01
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TISSUE-EMBRYONIC TROPHOBLAST;
WILKEN J.A., MATSUMCIC TROPHOBLAST;
"A Comparison of Chorionic Gonadotropin Expression by Human and
"A Comparison of Chorionic Gonadotropin Expression by Human and
Submitted (JAM 2001) to the EMEL/Genbank/DDBJ databases.
HESSP: POLISS; ARK08643.1;
HESSP: POLISS; ARK08643.1;
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Interpro: 1PR000345; dyc_hormone_beta.
Interpro: 1PR000145; dyc_hormone_beta.
FAMRT: SW00061; dHB: 1.
FAMRT: SW00061; dHB: 1.
FR003THE; PS00089; dLYCO_HORMONE_BETA_1; UNKNOWN_1.
FR003THE; PS00089; dLYCO_HORMONE_BETA_2; DYCNOWN_1.
FR003THE; PS00089; dLYCO_HORMONE_BETA_2; DYCNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT; 165 AA.
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Q9BEH2
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09GL37
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Bukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Buteleostomi;
Mamalala Butherla; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
(KSL_TaxiD-10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
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SHERMEN G.B., Heilman D.F., Hoss A.J., Bunick D., Lund L.A.;
Sherman G.B., Heilman D.F., Hoss A.J., Bunick D., Lund L.A.;
Wessenger FRAMS encoding the beta subunits of guinea pig (Gavia porcellus) luteinizing hormone (gphH) and putative chorionic generatorpin (gpGC) are transcribed from a single-copy gpLH/CGbeta gene.

PHEL, PAL, Endocrinol. 26,267-280(2001).

EMBL: AF556596, AAK84307.1;
SIGNAL CHORION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09246 PRELIMINARY; PRT; 127 AA.
0924A6;
0924A6;
0924A6;
0924A6;
01-DEC-2001 (TREBLEL 1. 19, Last sequence update)
01-DEC-2001 (TREBLEL 1. 19, Last sequence update)
PUTATIVE CHORIONIC GONADOTROPIN BETA SUBUNIT PRECURSOR
(FRAGMENT).
CANADACCALLUS (Guinea pig).
MARMAILE: Eutheria; Rodentia; Hystricognathi: Cavildae; Cavia.
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PUTATIVE CHORIONIC GONADOTROPIN BETA
                                                                                            SEQUENCE FROW N.A.

C STRINGSPROUGE DAMLEY;

A Lahang F.P. Mannikko A. Huhtanianal I.;

Fulland F.P., Mannikko A. Huhtanianal I.;

Lucinizing hormone beta-subunit in the rat.*;

Lucinizing hormone beta-subunit in the rat.*;

Lucinizing hormone beta-subunit in the rat.*;

Rush, USSS, ACC2149.1;

Rush, USSS, POL33, INGL.

Rush, USSS, POL33, INGL.

Rucerpc, IRR00319; Cys_knot.

Runcerpc, IRR00319; Cys_knot.

Rushry: Rush0319; Cys_knot.

Rushry: Rush0310; Cys_knot.

Rushy: Rush0310; Cys_knot.

Rushy: Rush0310; Cys_knot.

Rushy: Rush0310; Cys_knot.

Rushy: Rush0310; Cys_knot.

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SEQUENCE 127 AA; 13609 MW; 326B14DD6B72C2B4 CRC64;
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                                                                        Query Watch 57.7%; Score 448; DB 6; Length 142;
Best Local Similarity 62.0%; Pred. No. 4.1e-42; Indels 10; Gaps
Matches 80; Conservative 13; Mismatches 26; Indels 10; Gaps
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Bukaryota; Netazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Felidae; Panthera.
NCBL_razilo_7433;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Baldwin D.M., Bedows E., Miller-Lindholm A.K., Sherman G.B., Wilken J.A.,
"Alken J.A.,
"Characterization of recombinant tiger gonadotropins.";
Schmitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
BKNL: AF3543818 AMK10589.1;
HSSP; POL233; 1XUL.
Best Local Similarity 82.04; Pred. No. 1.1e-60;
Matches 114; Conservative 7; Mismatches 18; Indels
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ILIGEPPO; IPR001345; Cyg_knot.
ILIGEPPO; IPR001345; Clyco_hormone_beta.
ILIGERPO; OFR001445; Clyco_hormone_beta.
SWARY: SW0068; GHB; 1.
PROSITE; PS00165; GHCO_HORMONE_BETA_1; UNKNOWN_1.
SWOSITE; PS001689; GLYCO_HORMONE_BETA_2; 1.
SRQUBROCE 142 AA: 15117 HW; 234986A0271943DB CRC64;
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01-807-1996 (TERMELRE1, 01, Created)
01-807-1996 (TERMELRE1, 01, Asts sequence update)
01-30N-2001 (TERMELRE1, 17, Last sequence update)
11-811.
11-811.
Rattus norvegleus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                  09BD19 PRELIMINARY, PRT; 142 AA. 09BD19; 0.1-UN-2001 (TEMBLEE). 17, Created) 01-UN-2001 (TEMBLEE). 17, Last sequence update) 01-DEC-2001 (TEMBLEE). 19, Last annotation update) LOTEINIZING RORNONE BETA SUBUNIT.
                                                                                                                                                                                                                                                                              122 SKAPPPSLPSPSRLPGPSD 140
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SEQUENCE FROM N.A.
TISSUE-PITUITARY;
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09BDI9
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"Isolation and characterization of the black carp LH beta submit.";
Submitted (NOV-2000) to the EMEL/GenBank/DDBJ databases.
BABL: AF3199560; AAK07414.1;
HSSP; P01233; IXUL.
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01-UN-2001 (TrEMBLrel. 17, Last sequence update)
01-DN-2001 (TrEMBLrel. 19, Last annotation update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
LITERINIUM HORMONE BETA SUBURT.
Nyiopharyngodon piceus.
Nyiopharyngodon piceus.
Nyiopharyngodon fordata, Craniata; Vertebrata; Buteleostomi; Actinopearysii, Neopearysii; Teleostel; Buteleostomi; Cyprinicomes; Cyprinidae; Mylopharyngodon.
NORI_TAXID-75156;
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"Cloning of a CDNA encoding the luteinizing hormone beta chain
precursor in the marsupial, Monodelphis domestica.";
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL: XY056475; AALI3373.1;
SEQUENCE 141 AA, 15031 WW; SASBESEADIED9285 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51.5%; Score 400; DB 11; Length 141; 61.9%; Pred. No. 8.8e-37; Live 14; Mismatches 29; Indels (
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SUBUNIT.
15122 MW; 690EDF3CA555A6A3 CRC64;
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InterPro; IPR001545; Glyco_hormone_beta
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                                                         141 AA;
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Best Local Similarity
Matches 70; Conserv
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SEQUENCE FROM N.A.
TISSUE-PITUITARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EDISTRICE FROM N.A. BODNEd-11357063;
SECRET FROM N.A. FELLMan D.F. HOSS A.J., Bunick D., Lund L.A.;
Sherman G.B., Hellman D.F., Hoss A.J., Bunick D., Lund L.A.;
Hessenger Rava encoding the beta subunits of guinea pig (Cavia Porcellus) luteinizing hormone (gpLR) and putative chorionic gonadotropin (gpCG) are transcribed from a single-copy gpLR/CGbeta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDINEW-21255925; PubMed-11357063;
MEDINEW-21255925; PubMed-11357063;

"Messenger RNAs encoding the beta subunits of guinea pig (Cavia proceedlus) luteiniting hormone (gpH) and putative chorionic gonadotropin (gpCG) are transcribed from a single-copy gpLH/CGbeta J. Mol. Endocrinol. 26:267-280(2001).

EMBL: MESS7779; AAR&4305.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0934A;
01-108-2001 (TREMBLEAL. 19, Created)
01-108-2001 (TREMBLEAL. 19, Last sequence update)
01-108-2001 (TREMBLEAL. 19, Last sequence update)
01-108-2001 (TREMBLEAL. 19, Last sequence update)
LUTEINIZING HORMONE BETA SUGURIT PRECUESOR (FRAGENT).
EURA POCCELIUS (Guinea 1919).
EURA 1921 Metazoa, Chordata, Craniata; Vertebrata; Euteleostomi; Mammalia, Eutelenia; Rodentia; Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gavia porcellus (Guinea pig).
Gavia porcellus (Guinea pig).
Mammala: Wetheria; Rodentia; Rystricognathi; Caviidae; Cavia.
NCBL_MATPLO10141;
                                    POTENTIAL.
PUTATIVE LUTEINIZING HORMONE BETA
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SIGNAL 1 1 POTENTIAL.
CHAIN 15 135 LUTEINIZING HORHONE BETA SUBUNIT.
SEQUENCE 135 AA; 14432 MM; A44GG3DBDC5G07AE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 51.5; Score 400; DB 11; Length 135; Best Local Smallarity 61.99; Pred No. 8.44-77. Matches 70; Conservative 14; Mismatches 29; Indels 0
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092448; 092461 (TERMELTE1.19, Created)
01-DEC-2001 (TERMELTE1.19, Last sequence update)
01-DEC-2001 (TERMELTE1.19, Last sequence update)
01-DEC-2001 (TERMELTE1.19, Last annotation update)
PUTATIVE LUTEINIZING HORMONE BETA_SUBUNIT PRECURSOR.
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J. Mol. Endocrinol. 26:267-280(2001).
EMBL; AF356595; AAK84306.1;
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The SEQUENCE FROK N.A.

This page 2., Valts J., Meyer H.H.D.; the beta LH determinant loop to This Sequence of the beta LH determinant loop to This Cool different Perissodactyls and the estimated impact on the biological activity; the Sequence of the BMBL/GenBank/DDBJ databases.

In Submitted (FEB-1999) to the EMBL/GenBank/DDBJ databases.

EMBL, AF04/603; AAC04361.1; FEME, AF04/603; AAC04361.1; FEME, AF04/603; AAC04361.1; FEME, AF04/603; AAC04361.1; FEME, AF04/603; AAC04361.4; AAC04361.4; AAC04361.4; AAC04361.4; AACO4361.4; AACO43
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040619; U-UN-1998 (TERBLEL). 06, Created)
01-UN-1998 (TERBLEL). 06, Last sequence update)
01-UN-2000 (TERBLEL). 19, Last sequence update)
01-DEC-2001 (TERBLEL). 19, Last sequence update)
(FRACHEN).
FRACHENIA.
EQUATION (Kulan).
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Best Local Similarity 31.5%; Pred. No. 46-25;
Best Cocal Similarity 16; Mismatches 33; Indels (
Matches 32; Conservative 16; Mismatches 33; Indels (
       P SEQUENCE FROM N.A.

MOILTA T. Y. TOBAILEARI G., Takeuchl T.;

Moilta T. Y. Tobaileari G., Takeuchl T.;

L' Submitted (NOV-2000) to the EMEL/GenBank/DDBJ databases.

R EMEL, AB050816, BAB1767.1;

R HSSP: POL1331, IXU.

R HESP: POL1331, IXU.

R INEEPFO: IPRO01359, Cys.knot.

R INEEPFO: IPRO01359, Cys.knot.

R PARM: PRO0005, Cys.knot.

R SAMR: PRO0065, Cys.knot.

R SAMR: PRO0065, Girco, Hornone_beta.

R SAMR: PRO0065, Girco, HORNONE_BETA.]; UNKNOMN.1.

R PROSITE: PRO00561, Girco, HORNONE_BETA.]; UNKNOMN.1.
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DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-MAR-2001 (TrEMBLrel. 19, Last annotation update)
DE LUTEINIZING HORMONE BETA SUBUNIT.
OS ULA POTOTA (MARCA CARLADOW LYOUT) (Salmo gairdnerl).
OS CHARATOGEN WHATSO (Strength Canidata) Vertebatata; Euteleostomi; AC Chinopterygli, Neopherygli, Teleostel; Buteleostel;
CACTINOPERTYLI, Neopherygli, Teleostel;
CACTINOPERTYLI, Neopherygli, Teleostel;
CACTINOPERTYLI, Neopherygli, Teleostel;
CACTINOPERTYLI, Neopherygli, Teleostel;
CACTINOPERTYLINE (MARCA CACTINOPERTYLINE)
CACTINOPERTYLINE (MARCA CAC
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Scyliorhius canicula (Spotted dogliah) (Spotted catshark).

Scyliorhius canicula (Spotted dogliah) (Spotted catshark).

Elasmobranchii; Galecomcphii; Galecidea; Carcharhiniformes;

Scyliorhinides; Scyliorhinus.

NCBL_TAXID-7830;
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CHAIN 20 131 LUTEINIZING HORNONE BETA SUBUNIT.
SEQUENCE 131 AA. 14656 MM. D?RB952C62A6AR77 CRC64.
                                                                                                                                                                                                                                                                                                                                                 Ouery Match 38.7%; Score 301; DB 13; Length 140; Best Local Similarity 54.3%; Pred. No. 0.5-5-6.8 Matches 51; Conservative 15; Mismatches 28; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 38.0%; Score 295; DB 13; Length 131; Best Local Sinilarity 50.5%; Pred. No. 3.7e-23; Matches 48; Conservative 19; Mismatches 28; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouerat B.;
"Duality of gondotropins in gnathostomes.";
"Duality of gondotropins in gnathostomes.";
"Duality of GARP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ310345; CAC43236.1; — POTENTIAL.

1 9 POTENTIAL.
Pfam; PP00007; Cya_knot; 1.
SMART; SW0006B; GHB; 1.
PROSITE; PS0026B; GLYCO_HORMONE_BETA_1; UNKNOWN_1.
PROSITE; PS0068B; GLYCO_HORMONE_BETA_2; 1.
SEQUENCE 140 AA; 15820 MH; BF12723F35D5A010 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-DEC-2001 (TrEMBLRel. 19, Created)
D-DEC-2001 (TrEMBLRel. 19, Last sequence update)
01-DEC-2001 (TrEMBLRel. 19, Last annotation update)
LUTEINIZING HORMONE BETA SUBUNIT PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT; 131 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. TISSUE-PITUITARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          090W63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
Q90W63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 13
Q9DG92
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ROUGENCE FRON N.A.

RC ISSUE-PUTUTARY:

RX MEDLINE-20318422; PubMed-10859263;

RA Goverat B., Sellouk A., Salmon C.,

RY Phylogenetic analysis of the vertebrate glycoprotein hormone family

RY including mew sequences of sturgeon (Acipenser bacri) subunits of the

RY PHYLOGENET AND STRUCTURE AND STRUCTURE
                                                                                                                                                                                                     44 RVLQGVLPALPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGG 103
                                                                                                             4; Gaps
                                                                                                                                                                                                                                                                   10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVYCNYRDVRFESIR 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26 CEPVNETISAEKEECPTCLLIQTSICSGSCPTKDPVFKSALSTVQQHVCTYKDLRFATVT 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Acipenser baerii (Siberian sturgeon).
Bukaryota, Metazoa. Chordata, Craniata, Vertebrata, Euteleostomi,
Acipenpetrygii. Chondrostei, Acipenseriformes; Acipenseridae;
Acipenserines, Acipenser.
MCBL_TaxID=27689;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LURGOPIN BETÀ SUBUNIT
Renepus laevis (Affican clawed frog).
Rakaryora: Metazoa: Chordata, Cranlata; Vertebrata; Buteleostoml;
Maphibla: Butrachia, Anura; Mesobatrachia; Pipoldea; Pipidae;
Xenopodinae; Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 36.24; Score 121; DB 13; Length 137; Best Local Similarity 45.54; Pred. No. 1.4e-27; Matches 46; Conservative 21; Mismatches 30; Indels 'Matches 46; Conservative 31; Mismatches 31; M
Ouery Match 37.1%; Score 288; DB 6; Length 89; Best Local Similarity 62.2%; Pred. No. 1.59-24; Matches 56; Conservative 8; Mismatches 22; Indels Matches 56; Conservative 9; Mismatches 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL 1 22 POTENTIAL,
CHAIN 33 137 LUTEINIZING HORMONE.
ASSOCIATED 137 AA: 14757 WW: 37CFFB0BB2955607 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              G1-C7-2000 (TrEMBLrel. 15, Created)
01-C7-2000 (TrEMBLrel. 15, Last sequence update)
01-08C-2001 (TrEMBLrel. 15, Last sequence update)
LINERNIZING HORMONE PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-DRC-2001 (TrEMBLrel. 19, Created)
01-DRC-2001 (TrEMBLrel. 19, Last sequence update)
01-DRC-2001 (TrEMBLrel. 19, Last annocation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               70 LPGCPRGVNPVVSYAVALSCQCALCRRSTTDCG----GPKD 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY; PRT; 137 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 17
Q91999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 18
Q90WC1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 PSKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 PAGSYILPHCEPVNETVSVEKDGCPRCLVFQTAICSGHCLTKEPVKKSPFSNIYQHVCTY 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Thrust Analys.
Liu Z.J. Kins S., Karsi A., Dunham R.;
Channel caffish gonadctropth beta-subunits: cDNA cloning and their
Submitted (DEC-1998) to the EMEL/GenBank/DDBJ databases.
EMEN: AF11219. AMG2156.1;
HSSP: P01233: IXUI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
Fischer S., Velts J., Meyer H.H.D.;
Wincheotide and amino acid sequence of the beta-LH determinant loop
from different Perissodactyls and the estimated impact on the
blological activity.
Submitted (FEB-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; ARQ17602; AAC04160.1;
HSSP; P01213: IXUL.
                                                                    1-MA-2001 (TrEMBLrel. 16, Created)
01-MA-2001 (TrEMBLrel. 16, Last sequence update)
01-MA-2001 (TrEMBLrel. 16, Last sequence update)
00-DEC-2001 (TrEMBLrel. 19, Last annotation update)
00-MADOTROPIN BETA 2 SUBUNIT.
EUKARIOPIS MERACOS, Chordata, Craniata, Vertebrata; Euteleostoni;
Statinoferygli, Neopterygli; Teleostei; Buteleostei; Ostariophysi;
Stiluriformes; Ictaluridae; Ictalurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MGCO-BETÁ,
Equus sebra hartmannae.
Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mamaalia: Butheria; Perissodactyla; Equidae; Equus.
MCBL_TARIO-3135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 37.3%; Score 290; DB 13; Length 140; Dest Local Similarity 46.5%; Pred. Ro. 1.4e-24; Matches 49; Conservative 19; Mismatches 33; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JUN-1998 (TrEMBLRel. 06, Created)
01-JUN-1998 (FREMBLEL) 06, Last sequence update)
01-DDC-2001 (TREMBLREL) 19, Last annotation update)
LUTELNITUR HORMONE/CHORIONIC GONADOTROPHIN BETA-SUBUNIT
(FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro: IPR000359; Cys_knot.
InterPro: IPR001545; Gly_yco_hormone_beta.
Famer: SP00061; Cys_knot; 1.
SAMET: SW00065; GHS: 1.
SPOSTER: PS000561; GHS: 1.
SEQUENCE 140 AA: L15787 HH; AAA74CAA7E3D2892 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 89 89 89
89 AA; 9325 MW; 2AD973AEC7EAC5C8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 RDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          89 AA.
             140 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00689; GLYCO_HORMONE_BETA_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR000359; Cys_knot.
InterPro; IPR001545; Glyco_hormone_beta.
Pfam; PF00007; Cys_knot; 1.
SMART; SM00068; GHB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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046618
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RESULT 21

10 09DEH0

10 09DEH0

11 0 09DEH0

12 01-MAR-2010 (TREMELLEI. 16, Created)

12 01-MAR-2010 (TREMELLEI. 16, Last sequence update)

13 01-MAR-2010 (TREMELLEI. 19, Last sequence update)

14 01-MAR-2010 (TREMELLEI. 19, Last annotation update)

15 01-DEC-2010 (TREMELLEI. 19, Last annotation update)

16 01-MAR-2010 (TREMELLEI. 19, Last annotation update)

17 01-MAR-2010 (TREMELLEI. 19, Last annotation update)

18 01-DEC-2010 (TREMELLEI. 19, Last annotation update)

19 01-DEC-2010 (TREMELLEI. 19, Last annotation update)

10 01-DEC-2010 (TREMELLEI. 19, Last annotation update)

20 02 Sparidae; Pagrus.

20 03 Pagrus major (TREMELLEI. 19, Last annotation update)

21 01-DEC-2010 (TREMELLEI. 19, Last annotation update)

22 02 Sparidae; Pagrus.

23 02 NCBL_TAXID-143350,

24 NR 11 TAXID-143350,

25 NR 11 TAXID-143350,

26 MAR A MARAN MARA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27 RHLCHLANATISAEKDHCPVCVTFTTTICSGYCQTLDPVHXTALFPFKQKICTYKEIRYD 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 PRCRPINATLAVEXEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THE TOTAL TO
01-DEC-2001 (TERMELEL). 19, Last sequence update)
101-DEC-2001 (TERMELEL). 19, Last annotation update)
10TEINIZINE GRANDAR BETA SUBUNIT PRECURSOR.
10TEINIZINE GRANDAR ETA SUBUNIT PRECURSOR.
16 Mara ridibunda (Lidapinig frog) (termelers frog).
16 Maryota, Netazoa; Chordata; Crantata, Vertebrata; Euteleostomi;
17 Maryota; Netazoa; Chordata; Renocatachia; Ranoidea; Rana.
18 Maryota (1900-19405).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 26 POTENTIAL.
27 138 LUTEINITAG HORMONE BETA SUBUNIT.
138 AA; 15701 MW; 9C1EB077783486CF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match
13.14: Score 257; DB 13; Length 138;
Best Local Similarity 41.99; Fred. No. 6.4e-21.
Matches 44; Conservative 19; Mismatches 42; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match 33.1%; Score 257; DB 13; Length 146; Local Similarity 46.24; pred. No. 6.8e-21. Scales 48; Conservative 17; Mismatches 37; Indels 58 48; Conservative 17; Mismatches 37; Indels 58
                                                                                                                                                                                                                                                                                                                                                                Querat B.;
Producte B.;
Producted (MAY-2001) to the EMBL/GenBank/DDBJ detabases
EMBL, AJJ11355, CAC3922.1;
Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          67 SIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTC 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 [1]
SEQUENCE FROM N.A.
TISSUE-PITUITARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
CHAIN
SEQUENCE
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Best Local S:
Matches 48;
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Best Local Similarity 44.7%; Pred: No. 4,3e-27;
Matches 46; Conservative 17; Maimatches 40; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 RRICHPINATISAEKDDCPICVTLTTVCTGYCLTRDPVFKNALSSVXONICTYNEIRYD 80
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (PRACHER):
SERIERA:
SESSIBERA.:
SCYLORHUNG canicula (Spotted dogfish) (Spotted catshark).
BUARTYOCH MELAZOR: Chorduta, Craniata, Vertebrata; Chondrichthyes;
Elsamobranchii, Galeomorphii, Galeoidea; Garcharhiniformes;
SCYlorhindae; Scyliorhinus.
                                                                                                                                MEDITE-2130651; PubMed-11404476; Hungle Call Call Call Call Call C. Remo B.F., Brown D.D.; Remo B.F., Remo B.F., Brown D.D.; Hungle Gentlemorphosis and the onset of the negative feedback loc between the thyroid gland and the pitultary is controlled by type locothyronine deiodinase in Xenopus leevis.; Proc. Nall. Aced. Sci. U.S. A. 98:7348-7353(2001).
ENEMS. PS 201377 AM. 9986.1; ** SEQUENCE 137 AA. 15272 MW; 68215F1200F0E197 CRC64;
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FOLLICLE STIMULATING HORMONE BETA SUBUNIT.
; 1C141453C3DCF8C2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Watch 33.3%; Score 259; DB 13; Length 137; Local Similarity 42.1%; Prod. No. 3.38-21; Local Similarity 42.1%; Prod. No. 33.8-21; Indels 0 83; Indels 0
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*Duality of gonadotropins in gnathostomes.*;

*Duality of gonadotropins in gnathostomes.*;

*EMBL; AA310344; CAC43235.1;

*Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69 RLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTC 111
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01-DEC-2001 (TERBLEE1, 19, Last sequence update)
01-DEC-2001 (TERBLEE1, 19, Last sequence update)
FOLLICLE STIMULATING HORMONE BETA SUBUNT PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67 SIRLPGCPRGVNPVVSYAVALSCCCALCRRSTTDC 101
:|:|| | | :| :| !| !| :| !|
81 IIKLPDCLPGTDPFFTYPVAVSCRCNQCKMDYSDC 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT; 121 AA.
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121
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SEQUENCE FROM N.A.
TISSUE-PITUITARY;
                                                                  SEQUENCE FROM N.A.
NCBI_TaxID-8355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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Q90WG9
ID Q90WG9
AC Q90WG9
DT 01-DEC
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Matches
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090W64
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JUNE 090955 PRELIMINARY; PRT; 145 AA.

(200455) CONTROLLED. 19, Created)

DY 01-DEC-2001 (TPEMILTEL). 19, Last sequence update)

DY 01-DEC-2001 (TPEMILTEL). 19, Last sequence u
                                                                                                                                                                                                                                                                                                                                                                                               ## Match 12.6%; Score 253.5; DB 13; Length 145; Local Similarity 44.6%; Pred. No. 1.6e-20; hes 50; Conservative 18; Mismatches 43; Indels 1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Gaps
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TISSUE PIUTIARY:
RAJIANTE 2. YOSHURA Y. SURUKI M., Alda K.;
KAJIANTE S., YOSHURA Y., SURUKI M., Alda K.;
COMA CIONING Of two gonadotropin beta subunits (GTH-Ibeta and
TIPLEAL) and their expression profiles during gametogenesis in the
Japanese flounder (Paralichthys olivaceus).;
GGE. COMP. Badocrinol. 122:117-129(2001).
BMEL. M8042183: BAH473881.
BAGOSENCE 145 AAL 16295 WHY. BODCES2EE3E75OCC CRC64;
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09DG81
09DG81
09DG81
01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-DGC-2001 (TrEMBLrel. 19, Last annotation update)
01-DGC-2001 (TrEMBLrel. 19, Last Sequence update)
01-DGC-2001 (TrEMBLrel. 19, Last Sequence update)
03-DGC-2001 (TrEMBLrel. 19, Last Sequence update)
03-DGC-2001 (TrEMBLrel. 19, Last Sequence update)
03-DGC-2001 (TrEMBLrel. 19, Created)
03-DGC-2001 (TrEM
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Pfam; PF00007; Cys_knot; 1.
Marky; SM0068, GHB; 1.
PROSITE: PS00689; GLYCO SONRONE_BETA_2; 1.
SEQUENCE 80 AA; 8515 WW; F9EA66C2FD6FC97D CRC64;
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SEQUENCE FROM N.A.
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Best Local S
Matches 50
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090681
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07 01-MAR
DT 01-MAR
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Q90W55
ID Q90W5
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The Telecher S., Vetts J., Meyer H.H.D.;

The Telecher S., Vetts J., Meyer H.H.D.;

The Telecher S., Vetts J., Meyer H.H.D.;

The Torn of Ifferent Perissodactyls and the estimated impact on the biological activity. "State of the Perissodactyls and the estimated impact on the biological activity." The EMBL/GenBank/DDBJ databases.

The Submitted (FER-1999) to the EMBL/GenBank/DDBJ databases.

The MESF: POL233; IXUL.

THE MESF: POL233; IXUL.

THE MESF: POL233; IXUL.

THE MESF: The
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Bukaryota; Wetazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Ammaila; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBL_maxip.10116;
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01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
01-JUN-1998 (TrEMBLRel. 19, Last annotation update)
LUTERINIZING HORMONE BETA-SUBUNIT (FRACHENT).
LUTERINIZING HORMONE BETA-SUBUNIT (FRACHENT).
CREATOCHERIUM sinum sinum.
CREATOCHERIUM sinum sinum.
REMENOTE: Metazoa: Chordata: Craniata: Vertebrata; Euteleostomi; Mammalia: Eutherra; Perissodactyla; Rhinocerotidae: Ceratocherium.
(1)
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STRAIN-SPRAQUE DANLEY;
STRAIN-SPRAQUE DANLEY;
Libray F.P., Rannikko A., Huhtaniemi I.;
Lisolation and characterization of testis-specific cDNAs for lucehicaling hormone beta-subunit in the rat.";
Blochem. Biophys. Res. Commun. 210:858-865(1995).
HSSP, 90133; IXUL.
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NON_TER 1 1 1 SEQUENCE 82 AA; 8643 MW; 270411BA19B78A37 CRC64;
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01.NOV-1996 (TIERBLEAL 01, Last sequence update)
01.JUN-2001 (TIERBLEAL 17, Last apnotation update)
TESTICULAR LUTRINIZING HORMONE BETA SUBUNIT.
                                                                                                                                                                                                                                                                                                                   82 AA.
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InterPro; IPR001545; Glyco_hormone_beta.
                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
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063013;
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SC STRAIN-KANSAS;
SA Liu Z.J. Karsi A., Dunham R.;
SA Liu Z.J. Kim S., Karsi A., Dunham R.;
RI "Channel catfish gonaddriopin beta-subunits: CDNA cloning and their repression during ovulation."
RI Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
BREIL, AF112191, AA62135.1, XIU.
BREIL, AF112191, AA62135.1, XIU.
BRIEL, PRO19155; CHYOC, DECENDED PROSS. PRO00155; CHYOC, DECENDED PROMONE, BFCAM, DECENDED PROMONE, BFCAM, DECENDED PROSSITE; PS00261; GLYCO, HORMONE, BFCAM, DECENDED PROSSITE; PS00261; GLYCO, HORMONE, BFCAM, DECENDED PROSSITE; PS00261; GLYCO, HORMONE, BFCAM, DECENDED PROMONE, BFCAM, DECENDED PROMONE,
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Best Local Similarity 43.8%; Pred. No. 2.8e-20;
Matches 46; Conservative 15; Mismatches 44; Indels 0; Gaps
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GenCore version 5.1.3 (c) 1993 - 2002 Compugen Ltd.	using sw model 002, 17:57:02 ; Search time 31 Seconds (without alignments) 505.207 Willion cell updates/sec	-3 FINATLAVESKAPPPSLPSPSRLPCPSDT 141 Sapext 0.5 11073796 residues	chosen parameters: 747574		Score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. Supera Sup
Copyright	OM protein - protein search, using Run on: October 11, 2002,	Title: US-09-813-398-3 Perfect score: 777 Sequence: 1 PSKEPLRPRCRFINATLAVE. Scoring table: BLOSUMG. Gapex 0.6 Searched: 747574 segs. 111073796	ber of hits satisfying B seq length: 0 B seq length: 200000000 essing: Minimum Match (Database A_Genese_0.039001:* 1. /511031/949data/ 21. /511031/949data/ 22. /811031/949data/ 23. /811031/949data/ 4. /511031/949data/ 5. /511031/949data/ 6. /51031/949data/ 6. /51031/949data/ 6. /51031/949data/ 7. /51031/949data/ 8. /51031/949data/ 11. /51031/949data/ 12. /51031/949data/ 13. /51031/949data/ 13. /51031/949data/ 13. /51031/949data/ 13. /51031/949data/ 20. /51031/949data/ 21. /51031/949data/ 22. /51031/949data/ 23. /51031/949data/ 23. /51031/949data/ 23. /51031/949data/	Pred. No. is the number of racore greater than or equal, and is derived by analysis of the control of the contr

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hCG histidine subs	CG/bLH chimera, D	Chime:	opido 1	p pc	HCG analogue-D bet	ingle (CG/hFSH chimera,	horion	C Deta	101)/101	711/1067	ohim ohim	obia.			or Curing	110 9010	hCG/eLH chimera,	chain	etion	chime	H chime	etion	chine	chimer	10 000	at 100 a	0000	Curine	Human chorlonic	etion	chime	H CUIM	H Chime	chimer	H chime	H chime	chimer	CG/hFSH chimera,	beta	CG/hFSH chimera	H chime	ACG/hTSH chimera	CG/eLH chimera,	CG/hFSH chimera,	tuman chorionic go	CG/hTSH chimera	etion	H Chime	CHIM	100	T Chime	E Chime	otein)	hcG/hFSH chimera,	chain q	Human single chain	etion m	HCG/hFSH beta subu	ICG/hFSH beta	KG/HFSH beta subu	Single chain gonad	CG/hFSH chimera	Human single chain	Human chorionic go	Human chorionic	HCG/hTSH beta subu	H beta	н реса
hCG h1s	hcg/bri	nce/pre	he All chimers D	Modifie	HCG ans	Human 8	hcg/hFs	Human chorionic go	Human	TBP(20	100,004	hos/bir	100/ has		100/01	Chordon	1017	hcg/ell	Single chain gonad	hCG del	hCG/hLF	hcg/hrs	hcg del	hcG/hLF	hCG/bLF	Chorion	100	100	Helphan I	HUMAN C	שרף מפז	hCG/bLH chimera, D	ncG/nFS	hCG/hFS	hCG/hLH chimera, 1	hCG/hFS	hcG/hTS	hcg/hlh	hCG/hFS	HLH/HCG	hCG/hFS	hcg/hrs	hcg/hTs	hcg/elh	hcg/hFS	Human C	hCG/hTS	hcg del	DCG/OFS	nce/nra	hCG deletion mutan	PCG APPS	hcg/hFS	Glycopr	hcG/hFS	Single	Human s	hcg del	HCG/hFS	HCG/hFS	HCG/HFS	Single	hcg/hFS	Human s	Human c	Human c	HCG/hTS	HCG/HTSH L	HCG/H13
176 385	001	92.0	000	900	923	518	. 963	5 2	0.0	9 0	200	, 29	200		1 6	9 0	2	60	698	99	25	92	.64	21	660	80	2	3:	777	2500	6	5.5	400	104	22	167	193	24	980	00	191	94	5088	13	5084	6.	2 (9	0 4	7 0	, 99	90	7.7	56	94	03	75	.62	82	68	96	8	73	60	50	92	83	26	7.
AAB48385	AAR15	AAKID	AAR15	AAR31	AAR88	AAE04	AAR150	AAY87	AAI	AAKISS	1000	AADIS	ABDIS	STORE	ANDIS	A A WOOD	ANDIS	AAR15	AAR86	AAR15	AAR151	AAR15092	AAR153	AAR151	AAR150	AAW276	AAPIS	AADIE	NAVA 2		AAKIDI	AARIS	AARIS	AARIS	AAR151	AAR150	AAR150	AAR151	AAR15080	AAY433	AAR150	AAR150	AAR150	AAR1511	AAR150	AAW69449	AAR15090	AARIS	AAM33333	ABEODE	AARIGIGE	AAMOO	AAR150	AAW995	AAR150	AAU046	AAE044	AAR151	AAY432	AAY43289	AAY432	AAR86248	AAR150	AAE04509	AAU04620	AAE04492	AAY4328	AAY43290	ARIAS
12	12	7.5	2 2	Ä	11	55	2	7 6	?;	9 9	10	10	;	::	10	1 0	2 .	2	16	12	12	12	12	12	12	18	12	10	10	9 (7 .	7	7;	7	12	12	17	12	75	20	13	12	13	2	12	13	7	7	,	10	12	20	12	2	13	22	22	15	50	70	20	9 !	77	55	55	77	200	3 6	?
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96.0 96.0	95.9		9.5	95.6	92.6	92.6	95.4	4.0	20.0	9.00	1.50	95.	0.50		. 40		9 70	94.6	94.5	94.2	94.2	94.2	94.1	94.1	94.0	94.0	43.7		7 20		200	4.0	5.5	9.76	92.4	92.1	92.0	91.8	91.1	90.5	90.1	90.0	89.3	89.3	88.7	68.5	7.0	9.0			8	85.7	84.8	84.2	84.0	83.4	83.4	82.9	82.4	82.4	82.4	82.2	82.1	81.6	81.5	81.5	81.2	81.2	7.10
746	745	744	743	743	743	743	747	1 2	7,4	2 2	0 0 0	738	738	7 20	736	736	725	735	734	732	732	732	731	731	730	730	728	7.28	120	יייי	171	97/	17.5	91/	718	716	714.5	713	108	703	200	669	694	694	689	66/19	0 0	6/0	419		5.999	999	629	654	653	648	648	644	640	640	640	639	638	634	633	633	631	631	TCD
86 86	81	0 0	6 6	91	92	63	2 c	2 0	2 6	, 6	200	, 5	201	101	101	107	105	106	107	108	109	110	111	112	113	114	115	12	212	110	911	616	25.	177	122	123	174	125	126	127	128	129	130	131	132	55	• • •	133	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	150	'n

Partially delyvos
Glycoprotein hormo
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Human lutefinising
Sequence of human
Glycoprotein hormo
Glycoprote

121 SKAPPPSLPSPSRLPGPSDT 140

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The invention relates to determining whether an analogue of human channed generating professional (30) structure as compared to hCG. Analogues of hCG and other glycoprotein common the second of the 
N-glycosylation site; follicle stimulating hormone; luteinising hormone; thyroid stimulating hormone; in vitro fertilisation; fertility; mutation; beta subunit; glycoprotein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Misc-difference 79
/note- "wild-type Val at this position can be mutated to Asn to introduce a new N-glycosylation site; see claim 3*
                                                                                                                                                                                                                                                                                                                                                                                                                       /note- "wild-type Phe at this position can be mutated to Asn to introduce a new N-giycosylation site; see claim 3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Determining the 3-dimensional coordinates of chorionic gonadotrophin and computer-assisted re-design of the chemical structure - used for production of gonadotrophin hormone analogues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Grootenhuls PDJ, Harris DC, Isaacs NW, Lapthorn AJ;
                                                                                                                                                                                                                                                                                                                     Key Location/Qualifiers
Misc-difference 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Examples; Fig 2; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95US-0395238.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94GB-0003600.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UNIU ) UNIV GLASGOW.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-FEB-1994;
                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US5864488-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-JAN-1999.
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The present invention describes an antigen (A) comprising a carrier chancially conjugated with a polypeptide (I) capable of elicting antibody response to human chorionic gonadotropin (GG) and not to human clustenising mornone (LH), or a polypeptide (II) capable of elicting antibody response to human GG. (A) has cytostatic, contraceptive, antibipartensive and antidoabetic activities and can be used as part of a vaccine. (A) has cytostatic, contraception, abortion and for treating hormone related diseases, for treating hormone proteins. (A) is useful for contraception, abortion associated carcinomas and to boost an animals resistance to exogenous proteins e.g. viral proteins. (A) is also useful in animal fertility control. for treating cancer, hypertension, diabetes and related vascular controls of seases (A), safely and effectively controls various disease states of maldies caused or influenced by unusual excesses of certain conjugation which does not have serious harmful side effects.

The present sequence represents the human CG beta subunit maino acid invention. Human, chorionic gonadotropin antigen; follicle stimulating hormone; cootraception, abortion; hormone related disease; carcinoma; cytostatic; contraceptive; antilifettility; antilypertensive; antidiabetic; vaccine; fertility; cancer; hypertension; diabetes. New antigen for treating hormone related diseases, is conjugated with a specific polypeptide which elicits an antibody response against human chorlonic gonadcropin. Human chorionic gonadotropin beta subunit amino acid sequence. Disclosure; Column 18; 61pp; English. AAB20558 standard; protein; 145 AA. 78US-0936876. 87US-0013748. 97US-0913748. 97US-0311331. 73US-0466821. 74US-046295. 75US-06295. 80US-0112628. 81WS-012609. 81WS-012609. 81WS-012609. 95US-0466445. 11-DEC-2000 (first entry) (OHIS) UNIV OHIO STATE. WPI; 2000-542298/49. Homo sapiens. 25-AUG-1978; 26-AUG-1987; 26-AUG-1992; 17-FEB-1989; 16-CCT-1973; 16-CCT-1973; 16-CAR-1974; 16-CAR-1974; 16-CAR-1975; 16-CAR-1975; 16-CAR-1989; 18-MAY-1981; 02-NOV-1981; 02-NOV-1981; 06-JUN-1995; US6096318-A. 01-AUG-2000 Stevens VC; AAB20558; RESULT 4
AAABOOSS8
XX AAB205S8
XX AAB20
XX II-DD
XX III-DD
XX III-

145 AA;

Sequence

61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSS 120

122 SKAPPPSLPSPSRLPGPSDT 141

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Query Match 99.18; Score 770; DB 20; Length 145; Best Local Similarity 100.04; Pred. No. 18e-62; Indels (Matches 140; Conservative 0; Mismatches 0; Indels (

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0; Gaps

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as diagnostic tools to detect the presence of antibodies with respect to assay kits for assessing the biological samples, as control respents to assay kits for assessing the levels of these hormones in various samples, and in detecting and purifying receptors to which the native hormones bind: The single chain forms of the heterodimers or homodimers have the following advantages over their dimeric forms: they are more stable is needed to transcribe, translate and process, provide an alternate form truncated forms are unique starting asterism as reduing of activity levels and of in vivo half lives. Single chain forms are unique starting materials for identifying truncated forms with the protein to be engineerable for including of expensive the submutts permits the protein to be engineered without disturbing the overall folding of the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; single chain gonadotropin analog; anti-infertility; drug;
peptide therapy; interlaising hormone, LH; follicle stimulating hormone;
FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG;
glycoprotein; infertility; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human chorionic gonadotropin beta-subunit fragment (1-145 amino acids).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note- "Residue 'O' is present at this location in the sequence shown in column 33 of the specification"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 DVRFESIRLPGCPRGVNPVVSTAVALSCQCALCRRSTTDCGGPKDHPLTCDDFRPQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                          Query Match 99.14; Score 770; DB 22; Length 145; Best Local Similarity 100.0%; Pred. No. 1.8e-62; Marches 140; Conservative 0; Mismarches 0; Indels (Marches 140; Conservative 0; Mismarches 0; Indels 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
AAEO4491
ID AAEO4491 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 SKAPPPSLPSPSRLPGPSDT 140
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94US-0289396.

94US-0310590.

94US-031591.

95US-0475049.

97US-0853524.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UNIW ) UNIV WASHINGTON.
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                                                                                                                                                                                                                                                                       Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequence represents the amino acid sequence of human chorionic gonadoropin (hCG) beta, amino acids 1-145. The protein is an important glycopictan hormone heterodimer, along with luteninsing hormone (LB), follicle stimulating hormone (FB), thyroid stimulating hormone (FB), which all have identical alpha subunits but differing beta subunits. The proteins are useful for generating antibodies specifically heterodiments from compounds, as substitutes for the heterodiments forms of the hormones, in the treatment of infertility, as add for in vivo fertilisation techniques, and in other therapeutic methods associated with the native hormones. The single chain proteins are further useful as reagents in a manner similar to the heterodimens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; chorionic gonadotropin; hCG; glycoprotein hormone; infertility;
luteinistum hormone; LH; follicle stimulating hormone; FSH;
thyroid stimulating hormone; TH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques
                                                            Gaps
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                 Query Match 99.18; Score 776; DB 21; Length 145; Best Local Similarity 100.0%, Pred. Wo. 18e-62; Matches 140; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human chorionic gonadotropin (hCG) beta, amino acids 1-145.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 19; Column 34; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                                 AAU04619 standard; protein; 145 AA
                                                                                                                                                                                                                                             97US-0918288.
94US-019382.
94US-0289396.
94US-0314628.
94US-0351891.
95US-0475049.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US6242580-B1.
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18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAR-1999;
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The sequence represents the beta-subunit of human chorionic gonadotrophin detacks. For the sequence represents the beta-subunit of human chorionic beta-sic have a disulfide bridged analogues of amino acid residues 38-57 of beta-sic have come a loop structure. The peptides are used in workines to raise to human pitutiary luterinising homone, to control the biological activity of endogenous RiCs. These antibodies may be used in disposite pregnancy tests and in detection of reduced fertility or infartility or infartility or infartility or infartility or infartility. They may also be administered for contracaption or abortion processes to human pitution to a foreign carrier, beptides can contracaption or abortion processes to humans to treat homon-associated carcinomas.
                                                                                                                                                                                                                                                                                                                                                                         Peptide analogues of beta-human chorionic gonadotrophin which are able to state antibodies against human chorionic gonadotrophin are used in vaccines as contraceptives and/or abortificants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human chorionic gonadotrophin; HCG; contraception; abortion; varoner related disorder; hormone-associated carcinoma; cancer; diabetes; vascular disease; 2011nger-Ellison syndrome; chronic digestive disorder; antigenic modification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human chorionic gonadotrophin (HCG) beta-subunit (Structure I).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 99.1%; Score 770; DB 22; Length 145; Best Local Similarity 100.0%; Pred. No. 1.8e-62; Marches 140; Conservative 0; Mismatches 0; Indels (
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                                                                                                                                       (OHIS ) UNIV OHIO STATE RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 35; 214pp; English.
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06-OCT-2000; 2000WO-US27741.
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                                                                                                                                                                                                                                                                                                        WPI; 2001-328306/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 145 AA;
                                                                      06-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-JUN-1995;
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07-AUG-1992;
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                                                                                                                                                                                                                                  Stevens VC;
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AAU01139
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                                                                                                                                                                                                                                                                     The invention relates to human single chain forms of the glycoprotein common quartet which is an agonist or antagonist of intelainising hormone conformed quartet which is an agonist or antagonist of intelainising hormone (H), follicle stimulating hormone (CI), follicle stimulating hormone (CI), follicle stimulating hormone (CI), follicle stimulating hormone are betardiners baving identical alpha subunits and differing beta subunits. The agonist forms of single chain hormones are used in treating inferillity, as aids in vitro fertillisation techniques, and other thempeutic methods are useful a reaction of single chain hormones. The single chain hormones are useful associated with the native hormones in the single chain hormones are useful activities as control research in assay kits for assessing the levels of these hormones in various samples, and detecting and puritying creeptors to which the native hormones bind: The single chain hormones are last oused in affility chromatographic preparation of receptors or solution of subsequent preparations of these materials and to monitor invite of single chain hormones administered as puritication tools for isolution of subsequent preparations of these materials and to monitor invite of single chain hormones administered as puritication tools for isolution of subsequent to generate antibodies specifically immunoreactive with these new compounds, as substitutes for the heteroidment forms of hormones. The present sequence is human chorionic gonadotropin beta chain proteins are used to an assisting the control of subsidering the manage related to the invention Analog single chain proteins are used for constructing subjust described services as useful stritting compounds for template directed vector design and for the development of hormone specific vaccines for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human chorionic gonadotrophin beta-subunit. #GC; mammal; pregnancy test; human pitutiary luteinising hormone, redoced fertility; infertility; contraception; abortion; hormone-associated carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ouery Match 99.1%; Score 770; DB 22; Length 145;
Best Local Similarity 100.0%; Pred. No. 1.8e-62; Indels 0; Gaps
Matches 140; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLGGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                 New DNA or RNA encoding single chain protein useful in treating infertility, as alds in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Beta-subunit of Human Chorionic Gonadotrophin (HCG).
                                                                                                                                                                                                                  Example 19; Column 103-106; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAU00709 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W0200124765-A2.
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AAU00709
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The present sequence is given in a specification relating to the present polypeptides originally isolated from human early pregnancy utrine, now synthetically produced, as well as functional equivalents of these polypeptides. Novel beta-human chorionic gonadotrophin (hCG) fragments, designated Maternin (RTM) and referred to as MA and pMA peptides, are disclosed. Both native and synthetic MA Inhibited growth of human tumour cells inplanted into immuno deficient mice by between 60 to 100%. Faitave to control studies. The therapeutic MA polypeptides may be used for the prevention and treatment of a range of diseases and disorders, including human immunodeficiency virus (HTV) infections, disorders, including human immunodeficiency virus (HTV) infections, disorders (especially Raposi's sarcoma), wasting disorders, hemaniss, redistion mediated bone marrow damage and trauma related bload loss), inflammation and anglogenic disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPIMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                        Cells that produce therapeutic beta-human chorionic gonadotrophin fragments, useful for the treatment of human immunodeficiency virus infections, cancers, wasting disorders, hematopolatic disorders, inflammation and anglogenic disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.1%; Score 770; DB 22; Length 145; 100.0%; Pred. No. 1.8e-62; Live 0; Mismatches 0; Indels 0;
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                                                                                                                                                                                                                                                                                Gallo R, Bryant J, Lunardi-Iskandar Y, Powell R, Reitz M; Foulke J, Lewis G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beta subunit of human chorionic gonadotropin (HCG).
                                                                                                                                                                                                                             (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
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                                                                                                  05-AUG-2000; 2000WO-US21495.
                                                                                                                                                      06-AUG-1999; 99US-0147825.
13-MAR-2000; 2000US-0188777.
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Best Local Similarity 100.0
Matches 140; Conservative
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W0200110907-A2.
                                                   15-FEB-2001.
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                                                                                                                                                                                                                                                                                                                                                                      The present sequence represents the beta-subunit of human chorionic gondotrophin (#CG). The #CG beta subunit polypeptide sequence is considerably the disulfide bridge infants of the terminal cysteine amino acids of form a loop, and conjugated to acriter. The #CG antigenic peptides can be used in a vectime composition for prove/king an entitled bridge the beta of a carrier. The #CG antigenic peptides are useful for the purpose of contraception, abortion, completes are useful for the purpose of contraception, abortion, composition for the treatment of hormone-related disease states and to boost an and for the treatment of hormone-related disease states and consort and for the treatment of hormone-sacciated carcinomas, and to boost an conformation of the section of disease states and conformation of control disease, hypertension, collinger-Ellison syndrome, and chronic disease, hypertension, collinger-Ellison syndrome, and chronic disease, hypertension, collinger-Ellison syndrome, and chronic disease, hypertension, collinger-Ellison syndrome, and the control disease, hypertension, collinger-Ellison syndrome, and the chronic disease of the sundamental control disease of the convention of relatively large quantities of antitheolies for the non-endogenous materials in the body of the animals, and the consequent reduced risk of damage to the immune system, if exposed to the non-endogenous materials.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                             Novel vaccine composition for provoking the formation of antibodies to human chortonic gonadorropin, contains a peptide comprising disulfide bridges linking terminal cysteine residues to form a loop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
99.18; Score 770; DB 22; Length 145;
Best Local Similarity 100.04; Pred. No. 1.8e-62;
MACCHES 140; Conservative 0; Mismatches 0; Indels
MACCHES 140; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                             Disclosure; Column 19; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Beta-human chorionic gonadotrophin.
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ID AAB71765 standard; protein; 145.AA.
XX
                                                                    (OHIS ) UNIV OHIO STATE RES FOUND.
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                                                                                                                                                                          WPI; 2001-289819/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo saptens.
                                                                                                                          Stevens VC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB71765;
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The sequence is encoded by an analogue of MCG beta subunit cDNA contgrieve slear mutations which eliminate restriction sites, it was preputed from the plasmid pKMB inGC beta, a construct contgrieve hGC beta subunit isolated from human plasmid and Goodman) in plasmid pKMB, a derivative of pUCIB designed for facilitate clouing of glycoprotein hormones. The sequence as used as the starting construct for many mutants, (See AMRISOS)-RISI25 and AARISIGI-RISI9B).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLGGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human chorionic gonadotropin; RCG; thyroid stimulating hormone; Tast; thyroid cancer; hypothyroidism; Graves' disease; prognosis; diagnosis; therapy.
                                                                                                                                                                                                                                                                                        New glyco-protein hormone analogues - for inducing fertility as immuno-castration against, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match
Ouery Match
Best Local Similarity 100.04; Pred. No. 2e-62;
Best Local Similarity 100.04; Pred. No. 2e-62;
Aaches 140; Conservative 0; Mismarches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualiflers
1..20
/note- signal peptide*
21..165
/note- mature protein*
Location/Qualifiers
1..20
/label= signal sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY05748 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                       Example 3; Fig 4a; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human chorionic gonadotropin.
                                                                                                                                                      90US-0520703.
                                                                                                                       91WO-US03162.
                                                                                                                                                                                   (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-JUL-1999 (first entry)
                                                                                                                                                                                                                  Campbell RK, Moyle WR;
                                                                                                                                                                                                                                              WPI; 1991-353528/48.
N-PSDB; AAQ14800.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165 AA;
                                                                                                                       07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                    08-MAY-1990;
                                                           W09116922-A.
                                                                                          14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY05748;
  Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
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                                                                                                                                                                                                                                                                                                                                   Immuniting solected mammalian species with antigenically modified peptides for the production of polyclonal antibodies for contraception, abortion or treatment of hormone-related disease states such as cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The administration of a polypeptide determinant of a reproductive hormone such as human chorionic gondedropin (GG) can be used to produce non-immunogenic polyclonal antibodies (Ab) specific to that hormone. This process is useful for contraception, abortion and for treating hormone related disease states and disorders such as hormone-associated carcinomas. The polyclonal antibodies can also be used to boost an animals resistance to exogenous protein a side effects than the administration of steroids consisting of synthetic mon protein hormones, which were used conventionally.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0: Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Outery Match 199.1%; Score 770; DB 22; Length 145; Best Local Stmliarity 100.0%; Pred. No. 18e-62; Matches 140; Conservative 0; Mismatches 0; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Glycoprotein hormone; hCGB'; fertility; immuno-castration; immuno-contragestive; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human chorionic gonadotropin beta subunit.
                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Column 18; 57pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15043 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 SKAPPPSLPSPSRLPGPSDT 140
                                                                   7805-0936876.
8705-003748.
9205-0311331.
8905-0311331.
7305-035892.
7305-0406821.
7405-042055.
7505-062031.
8105-012628.
                                         95US-0466660.
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                                                                                                                                                                                                                                          (OHIS ) UNIV OHIO STATE.
                                                                                                                                                                                                                                                                                                      WPI; 2001-040423/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 145 AA;
                                                                   25-AUG-1978;
15-JUL-1987;
26-AUG-1992;
17-FEB-1992;
07-MAY-1973;
16-OCT-1973;
14-OCT-1975;
16-JUL-1981;
20-NOV-1981;
                                         06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
          14-NOV-2000.
                                                                                                                                                                                                                                                                         Stevens VC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR15043;
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The invention relates to the production of analogues of a heterodimeric subunit giycoporotain hormone (GR9), e.g. human chorionic gonadotropin (hCG), human intensialing hormone (RF8), human intensialing hormone (hL8), human follicie stimulating hormone (hCG), human intensialing hormone (hCG), human intensialing hormone (hCG), human chicked stimulating hormone, hormone (hCG), human chicked stimulating he handous retaining at least a portion of the charactivity for the corresponding native GPH receptor. This sequence constitutive for the corresponding native GPH seeptor. This sequence corresponding hormone, hormone, hormone, hormone, hormone, hormone, hormone, chereby creating greater likelihood that the discremit be formed in vivo and the formed dinner will have affinity for the native receptors and have segment activities of the hormones. The analogues can have uses as for the native GPHS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQWVCNTR 61
11 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQWYCNTR 80
11 SKEPLRPRCRPINATLAVEKEGCPWTRVTGWTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New stabilised glycoprotein hormones - particularly hCG hLH, hFSH or hTSH or in Intergulated the have an intergulated to the proper at plant of the heaven the plant of the plant of the heaven the heaven between the heaven the heaven between 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 99.18; Score 770; DB 20; Length 165; Best Local Similarity 100.00, Pred. No. 2e-62; Matches 140; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; chorionic gonadotrophin; hCG; DNA vaccine; cancer; fertility control; contraceptive; immunogen.
         stability; primer; amplification; PCR; mutation
                                                                                                                                                                                                                                                                                                                                                                                                                  (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human chorionic gonadotrophin beta-subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Fig 4A; 139pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB15358 standard; protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US13070.
                                                                                                                                                                                                                                                                                                                                                  97US-0050784.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 165 AA;
                                                                                                                                                                                                                                                                                       25-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                  25-JUN-1997;
                                                                             Homo saptens.
                                                                                                                                             W09858957-A2.
                                                                                                                                                                                                                  30-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB15358;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence represents human chorionic gonadotropin (CG). The invention is based upon the discovery that mutent the invention is based upon the discovery that mutent the full of the invention is based upon the discovery that mutent the man sproperotein hormone common alpha subunit (see ANYOSTAG).

CE and mutent human thyroid stimulating hormone (TSB) beta subunit (see ANYOSTAT), each comprising amino acid substitutions relative to the vild type sequences, can be produced and absembled to form mutent TSB heteroflame to sea mutent TSB heteroflame comprises the TSB beta in vitro and longer half life in vivo than wild-type heteroflamers.

CC in one embodiment, a mutent TSB heteroflame comprises the TSB beta subunit joined via a peptide bond at its C-terminus to the subunit joined via a peptide bond at its C-terminus to the subunit included methods of treating or preventing hypothryoidism, treating or disorder characterised by the presence of creating for a disorder characterised by the presence of creating for a disorder characterised by the presence of creating cor a disorder characterised by the presence of creating cor a disorder characterised by the presence of creating cor a disorder characterised by the presence of the TSB cheterodlamers can also be used for the targeted delivery of the repetition to the thyroid or to thyroid cancer cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; hTSH; htman chorionic gonaddriopin; attainising hormone; alsulphide bond; human follicle stimulating hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New thyroid stimulating hormone mutants with increased bloactivity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 99.1%, Score 770; DB 20; Length 165; Best Local Similarity 100.0%, Pred, Wo. 2e-62, Warches 140; Conservative 0; Mismatches 0; Indels
134..165
/note= "C-terminal extension peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human chorionic gonadotrophin beta subunit hCG-beta'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW99533 standard; Protein; 165 AA.
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                                                                                                                                                                                                                                                                                                                                                                                  (UYMA-) UNIV MARYLAND BALTIMORE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Szkudlinski MW, Weintraub BD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                              22-SEP-1997; 97US-0939472.
                                                                                                                                                                                                                                              98WO-US19772.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-254714/21.
N-PSDB; AAX25387.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 165 AA;
                                                                                                    W09915665-A2.
                                                                                                                                                                                                                                              22-SEP-1998;
                                                                                                                                                                         01-APR-1999.
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    Peptide
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0; Gaps

17-MAY-1999;

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The present invention provides the sequences of several immunogenic epitopes and antibodies to human chorionic gonadotrophin (hGD). These can be used in the treatment of cancers where hGG synthesis occurs. Including badder, parereatic, certical, colorectal, iung, osesphageai, breast, pastric, prostete, oratio, uterine and endometrial cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Methods for producing heterodimers, particularly analogues of hormones,
                                                                                                                                         Human, antI-human chorionic gonadotropin (hCG) monoclonal antibody immunoreactive with a 2imer N-terminal fragment of C-terminal 37 subunits of hCG beta subunit, used to treat cancer along with vaccine comprising hCG groups
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Caps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                  99.1%; Score 770; DB 22; Length 165; 100.0%; Pred. No. 2e-62; Live 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HCG beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                Disclosure; Fig 1; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY43298 standard; Protein; 203
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                     (AVIB-) AVI BIOPHARMA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.0
Matches 140; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-620431/53.
                                                                                                      WPI; 2001-025010/03.
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-OCT-1999.
                                                              Iversen PL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY43298;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence comprises the human chorionic gonadotrophin (hCG) beta-submit. Fragments of the protein were used in the methods of the the function which involve the use of DNA vaccines encoding hCG antigens to induce an immune response and enable the treatment of cancer and provide a novel method of fertility control. In particular, they can be used to treat colorectal, breast and lung cancer, as hCG is associated with these types of tumours.
                                                                                                                                                                                                                                                                                                                                              Inducing immune response to human chorionic gonadotropin (bCG), useful for treatment of cancer and fertility control comprises exposing cells to nucleic acid construct encoding MCG immunogenic epitope -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 99.18; Score 770; DB 21; Length 165; Best Local Similarity 100.04; Pred. No. 2e-62; Macches 140; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; chorionic gonadotrophin; hCG; cancer; vaccine; immunogenic epitope.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
AAB49896
ID AAB49896 standard; protein; 165
XX
                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 25; Fig 1A; 45pp; English.
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                                                                                                                      99WO-US30232.
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                                                                                                                                                                                                    (AVIB-) AVI BIOPHARMA INC.
                                                                                                                                                                                                                                                                                WPI; 2000-466124/40.
N-PSDB; AAA73833.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    165 AA;
                                     WO200041717-A2.
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                                                                                                                                                            18-DEC-1998;
                                                                                                                 17-DEC-1999;
Homo sapiens.
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                                                                              20-JUL-2000.
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                                                                                                                                                                                                                                             Iversen PL;
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This sequence is a fusion protein of RCC and Jun. The invention cleares to a method of forming a cysteine knote protein (1) having a lipha cleares to a method of forming a cysteine knote protein (1) having a lipha cleares to a method of forming a cysteine knote protein (10) having a lipha central conditions of the central of both subunits or the N-terminus of the central conditions and the conditions of the case of the C-terminus of the beta-subunit and dimerising the conditions of the central conditions and the conditions of such as the conditions of the conditions of such conditions of such conditions and industries that conditions conditions of the conditions of such conditions and industries that conditions of such conditions. The N-terminal part of a glycoprotein hormone may be committed in the conditions. Heterodimers have longer circulation times in vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; thorapy; Jun.
                                                               Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
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99.18; Score 770; DB 20; Length 206;
Best Local Similarity 100.04, Pred. Wo. 2.5-6.6;
Matches 140; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HCG beta subunit-Jun fusion protein sequence.
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                                                                                                                                                       Example 7; Fig 20; 73pp; English.
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   WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 206 AA;
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Synthetic.
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                                                                                                           This sequence is a fusion protein of HGG and Jun. The invention clearlies to a method of forming a cystein knot protein (i) having alpha conclusions and beta-subunits comprising attaching a dimerisation domain (DD) to either the Witermini of both subunits or the Witerminia of the clearly attaching a dimerisation domain (DD) to either the Witerminia of both subunits or the Witerminia of the clearly produced the Certain of both subunits or the Witerminia of the clearly of the Certain of the C-terminia of the beta-subunit and dimerising the products to form a heterodimeric protein analog (II). The method is cused to produce analogues (agonists or antagonists) of deglycosylated glycoprotein homones, potentially useful, e.g. for treating infertility where caused by polycystic ovarian disease (associated with excessive cused to project or any polycystic ovarian disease, associated with excessive facilitates the formation of heterodimers, that have similar structures and allows the formation of heterodimers, that have similar structures and allows the combination of subunits that would otherwise combines, and allows the combination of subunits that would otherwise combines. Dependence and of subunitarial part of a dycoprotein hormone may be committed to subunitarial subunits.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 99.1%; Score 770; DB 20; Length 203; Best Local Similarity 100.0%; Pred. No. 2.5e-62; Indels 0; Gaps Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RCG beta subunit-Jun fusion protein sequence.
from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MAK43303 | MAKA3303 
                                                           Example 7; Fig 20; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SKAPPSLPSPSRLPGPSDT 141
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This sequence represents a fusion protein of the human chorionic conductorphin (RGC) Deta subunit and Jun. The livention relates to a conductorphin (RGC) Deta subunit and Jun. The livention relates to a certain of forming a cysteine knot protein (1) having alpha and the method of forming a cysteine knot protein (1) having alpha and the method of forming a cysteine knot protein (1) having alpha and the relation of the latenthian of the alpha-subunit and the relation domain (DD) to either the N-ternainus of the alpha-subunit and the relation of the alpha-subunit and to the N-ternainus of the alpha-subunit and hardward of a heterodimeric protein analog (11). The method is used to produce nationally specially useful, e.g. for treating infertility where caused by polycystic ovarian disease (associated with excessive levels of interliating hormone). Products that retain DD's are also useful as intentiating and immunogenic or properties) to native dimers, and allows the formation of heterodimers, that have similar structures can allows the combination of subunits that would otherwise combines.

Comparison of a subunitar that would otherwise combines and condition without loss of activity, and attachment of the DD reduces the formation of homodimers here of the Dreduces in this relation times in the view in individual subunits.
                                                                                                                                                                                                                                                                                                                  Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
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AN43304
ID AN13304 standard; Protein; 212 AA.
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14-APR-1998;
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Synthetic.
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                                                                                                                                                                                              Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
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                                                                                                                                                                                                                                                                                                       Example 7; Flg 20; 73pp; English
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AAX43278
LD AAX43278
AC AAX432
AX AAX432
AX B Human
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05-JUN-2001.

21-0CT-1999,

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The sequence represents the amino acid sequence of single chain goodcropin analogue 11. The giveportein homomone analogue 13. The giveportein homomone and the homomone of the homomone. The single chain protein is did for in vivo fertilisation techniques, and in other therapeutic methods associated with the native horanone. The single chain protein is further useful as a reagent in a manner similar to the heterodimer, as a diagnostic tool to detect the presence of annibodies with respect to the native proteins in the presence of annibodies with respect to the native proteins in the commons in various samples, and in detecting and the level of the samples, as control reagent in assay kits for assessing the levels of these horanones him various samples, and in detecting and the corn soft the heterodimers or homodimers have the following advantages over their dimeric forms: they are more stable, problems of recombinant control of the process, provide an alternate form thus permitting fine training of activity levels and of in vivo half lives. Single chain forms are unique starting materials for indentifying remoter forms. The linkage between the submits permits the process are provided an alternate form thus permitting the control of the process. Provide an alternate form thus permitting the control of the dimer. The linkage between the submits permits the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds. In treating infertility, or as aids for in vivo fertilization techniques.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 SKEPLRPRCRPINATLAVEKEGCPYCITVNTTICAGYCPTMTRVLQGVLPALPQVYCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESCUT. 22
AAUO4614
ID AAUO4614 standard; Protein; 265 AA.
X AAUO4614;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 5; Fig 5; 86pp; English.
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                                                                                                                                         94US-0289396,
94US-0310590,
94US-0334628,
94US-0351591,
95US-0475049,
97US-0853524,
                                           99US-0282357
                                                                                          97US-0918288
                                                                                                                                                                                                                                                                                                         (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-424301/45.
N-PSDB; AAS08485.
                                                                                                                                                                                                                                                                                                                                                     Boime I, Moyle WR;
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                                                                                                                                                                                     04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
                                        31-MAR-1999;
                                                                                          25-AUG-1997
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                                                                                                                                                                                                                                                                                                                                                                                 This sequence is a fusion protein of HGG and Jun. The invention accelerates to a method of forming a cysteine knot protein (i) having a pipul and relates to a method of forming a cysteine knot protein (ii) having a pipul and beta-subunits comprising attaching a dimerisation domain (DD) to either the N-termina of both subunits or the N-termina of the capture of the capture of the characteristic or the N-termina of the beta-subunit and dimerising the products to form a heterodimeric protein analog (II). The method is compared to produce analogues (sponists or anagonists) of delyroxylated sused to produce analogues (sponists or anagonists) of delyroxylated sused to produce analogues (sponists or anagonists) of delyroxylated sused to provide forminally useful. 6.9 for treating infertility where caused by polycystic ovarian disease (associated with excessive compared to an inference of subunits of the total continuing highly antigents and mannogens or antigens (since a DD may contoining highly antigens of another formation of heterodimers, that have similar structures and allows the combination of subunits that vould otherwise combines, and allows the combination of subunits that vould otherwise combines.

Condition and an analogue of subunits that vould otherwise combines, be modified without loss of activity, and attachment of the DD reduces to vivo than individual subunits.
                                                                                                                                                                                                                                                                             Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; glycoprotein hormone; infertility; in vivo fertilisation;
single chain gonadotropin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Single chain gonadotropin analogue #1.
                                                                                                                                                                                                                                                                                                                                               Example 7; Fig 20; 73pp; English.
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                                        99WO-US08018.
                                                                                    98US-0059625.
                                                                                                                                      (UYNE-) UNIV NEW JERSEY.
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                                                                                    14-APR-1998;
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The invention relates to human single chain forms of the glycoprotein formone duranter which is an agonist or antegonist of luteinising hormone [LB], follicle stimulating hormone [FB], thyroid stimulating hormone [FB], thyroid stimulating hormone [FB], thyroid stimulating hormone [FB], thyroid stimulating hormone having identical alpha subunits and differing beta subunits. The agonist forms of single chain hormones are used in treating infertility, as aids an sociated with the native hormones, and other therspect in embrods associated with the native hormones. The single chain hormones are useful detect the presence of antibodies with respect to the native proteins in biological samples, as control reagents in assay kits for assessing the
                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
21.165
7.00te* "Corresponds to 1-145 amino acids of human chorlonic gonadotropin (CG) beta-subunit*
166.171
Acct.* "Linker peptide*
174.565
7.00te* "Corresponds to 1-92 amino acids of human single chain gonadotropin alpha-subunit*
                                                                                                                                                                                                                                                                                      Human; single chain gonadotropin analog no:1; anti-infertility; drug;
peptide therapy; lutefinising hormone; LH; follicle stimulating hormone;
PSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG;
glycoprotein; infertility; fusion protein.
81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the netive hormones
                                                                                                                                                                                                                                                      Human single chain gonadotropin analog no:1.
                                                                                                                                                   AAE04474 standard; Protein; 265 AA.
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                               94US-0199382.
94US-0289396.
94US-0310590.
94US-0334628.
95US-0475049.
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N-PSDB; AAD08785.
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Synthetic.
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12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
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                                                                                                                                                                                  AAE04474;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Region
                                                                                                                                                                                                                                                                                                                                                                                                                          Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Region
                                                                                                                   RESULT 23
AAE04474
ID AAE044
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The sequence represents the amino acid sequence of single chain gondadotropin analogue #18.

Gondadotropin analogue #18.

The jycopotedin hormone analogue #18.

Consecut for generating antibodies specifically immunoreactive with new compounds, as a substitute for the heterodiment of the monones, in the treatment of infertility, as an aid for in vivo fertilisation techniques, and in other therapeutic methods associated with the native hormone. The single chain protein is further useful as a reagent in a manner similar to the heterodimen, as a diagnostic tool to detect the commone. The single chain protein is further useful as a reagent in a manner similar to the heterodimen, as a diagnostic tool to detect the composition of antibodies with respect to the native proteins in the bounds of antibodies with respect to the native proteins in the conjugates hormones in various samples, and in detecting and proteins of the native hormones bind. The single chain forms the manner of the heterodimers or homodimers have the following adventages over their dimetic forms: they as final gene is needed to transactible, translate and process, provide an afternate form thus permitting fine tuning of activity levels and of in "vivo half lives. Single chain forms care unique starting materials for identifying truncated forms with the catcular and process, provide an afternate form thus permitting the catcular of the dimer. The linkage between the subunits permits the protein to be engineered without disturbing the overall folding of the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 STEPLAPRCREIMWILAVEREGCPVCITYWTTICAGYCTHTRVLOGVLPALPOVYCNYR 61
11 HILLHITHIHHHHHHHHHHHHHH
21 SKEPLARRENARIARENGCYCTYWTTICAGYCPTHTRVLOGVLPALPOVYCHYR 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                               Ruman; glycoprotein hormone; infertility; in vivo fertilisation;
single chain gonadotropin.
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                                             Single chain gonadotropin analogue #la.
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94US-0199382.
94US-0289396.
94US-031628.
94US-0351591.
95US-0475049.
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             23-OCT-2001 (first entry)
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N-PSDB; AAS08509.
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18 - PEB - 1994;
12 - AUG - 1994;
22 - SEP - 1994;
07 - DUN - 1994;
07 - JUN - 1995;
09 - MAY - 1997;
                                                                                                                                 Homo sapiens.
                                                                                                                                                                US6242580-B1.
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The invention relates to human single chain forms of the glycoprotein common quarter which is an agoniato a managonist of intensinising hormone componence (HJ), follicle stimulating hormone (FSH), thyroid stimulating hormone (HJ), follicle stimulating hormone (HJ), follicle stimulating hormone (FSH), thyroid stimulating hormone (HJ), follicle stimulating hormone (FSH), thyroid stimulating hormone (HJ), follicle stimulating submitts and differing beta submitts. The agoniat corresponds of single chain hormones are used in teating infertility, as aids in vitro fertilisation techniques, and other therapeutic methods associated with the native hormones are useful associated with the native hormones are useful associated with the native hormones, are disaponated to biological samples, as control research in associated the presence of antibodies with respect to the native proteins to biological samples, as control research in associated than mornones are useful selecting and purifying creeptors to which the native hormones blud. The single chain moments can be also used in affairty chromatographic preparation of receptors or cathonone antibodies. They are used as purification tools for isolation of subsequent preparations of these materials and to monitor isolation of subsequent preparations of these materials and to monitor of the preparation of single chain hormones administered as afungs. The single chain glycoproteins are used to generate antibodies specifically immunoractive (consisting of human single chain gonadorropin and of not a related to the invention. Analog no.1a is a fusson protein and companied to the invention and and on the analog serves as a useful starting compound for template directed vaccine design and for the development of hormone-specific vaccines for use in humans.
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Best Local Similarity 100.0%; Pred. No. 3.3e-62;
Matches 140; Conservative 0; Mismatches 0;
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94US-0289396.
94US-0310590.
94US-034628.
94US-034628.
97US-0475049.
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N-PSDB; AAD08809.
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              18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1994;
07-JUN-1995;
09-MAY-1997;
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levels of these hormones in various samples, in detecting and purifying receptors to which the native hormones bind: The single chain hormones con are also used in affinity chromatographic preparation of receptors or antihomane santibodies. They are used as purification tools for continuous of subsequent preparations of these materials and to monitor of sobsequent preparations of these materials and to monitor of scoprofusias are used to generate antibodies specifically immunoraative vith these me compounds, as substitutes for the heterodimeric forms of hormones. The present sequence is human single chain oncil as fusion protein consisting of human choicate chain gonadotropin (c5) beta subunit (1-145 amino acids) cof human single chain gonadotropin along the consisting of human single chain gonadotropin subunit (1-162 amino acids) by a linker sequence. This analog serves as a useful starting compound specific vaccines for use in humans.
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11.165

Anote— "Corresponds to 1-145 amino acids of human chorlonic gonadorropin (CG) beta-subunit.

166.173

Anote— "Linker peptide"

174. 265

Anote— "Corresponds to 1-92 amino acids of human single chart gonadorropin alpha-subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; single chain gonadotropin analog no:la; anti-infertility; drug; peptide therapy; lutefathising hormone; lif; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein; muteant; mutein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTIDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 99.1%; Score 770; DB 22; Length 265; Best Local Similarity 100.0%; Pred. No. 3.38-62; Ideals Watches 140; Conservative 0; Mismatches 0; Ideals 0; Gaps
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251
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 265 AA;
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Synthetic.
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Region
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AAEO4446
AAEO446
AAEO446
AAEO4AE
AAEOAAE
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Length 265; Indels

19-JAN-2000 (first entry)

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This sequence is a fusion protein of HCC and Jun. The invention claims acqueated to forming a cysteine knot protein (i) having alpha calcless to a method of forming a cysteine knot brotein (ii) having alpha and beta-subunits comprising attaching a dimerisation domain (DD) to either the Nitermini of both subunits or the Niterminia of the calching a dimerisation domain (DD) to either the Niterminia of both subunits or the Niterminia of the Calchina of the calchina of the Calchina of the Cartains of the calchina of the combination of heterodimers, that have shall are thereful and allows the combination of subunits that would otherwise combine of and allows the combination of subunits that would otherwise complice to poorly, or not at all. The Niterminal part of a glycoprotein hormone may be modified without loss of activity, and attachment of the DD reduces to constitute the bound of the Combination of subunits.
                                                                                                                                                             Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             189 DVRFESIRLPGCPRCVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPREQDSS 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 99.18; Score 770; DB 20; Length 273; Best Local Similarity 100.04; Pred. No. 3.4e-62; Matches 140; Conservative 0; Mismatches 0; Indels (
                                                                                                                 HCG beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 6; Fig 19; 73pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  249 SKAPPPSLPSPSRLPGPSDT 268
                                                                 19-JAN-2000 (first entry)
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                                                                                                                                                                                                                                                                              Homo sapiens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence is a fusion protein of hos and Jun. The invention calcletes to a method of forming a cysteine knot protein (1) having alpha calcletes to a method of forming a cysteine knot protein (1) having alpha and beta-subunits comprising attaching a dimerisation domain (0D) to either the N-termino of the subunits or the N-terminos of the calclete the calclete the Compression of the calculations of the beta-subunit and to dimerising the products to form a heterodimeric protein namelog (II). The method is used to produce analogues (sponists or antegonists) of deglycopylated superior caused by polycystic ovarian disease (associated with excessive calcletes) or intentialing hormone). Products that retain but with excessive calculates or antiques (since a Do may containing highly antiquence) facilitates the formation of heterodimers, that have similar structures and allows the combination of subunitar that would otherwise combines, and allows the combination of subunits that would otherwise combines. Dependence of subunits that would otherwise combines and of subunitarial that would otherwise combines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                 Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 99.1%; Score 770; DB.20; Length 273; Best Local Similarity 100.0%; Pred Hw.0.3.4e-62; Models 0; Gaps Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps
                                     HCG beta subunit-Jun fusion protein sequence.
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AAY43292
ID AAY43292 standard; Protein; 273 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 6; Fig 18; 73pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0059625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 273 AA;
                                                                                                                                                                                                                                                                           WO9953065-A1.
                                                                                                                                                                                                                                                                                                                                                                      13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                  14-APR-1998;
                                                                                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                          21-OCT-1999.
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99WO-US08018. 98US-0059625. 0; Gaps

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Fri Oct 11 17:40:40 2002

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2 SKEPERPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human chorionic gonadotrophin peptide derivatives - are active in
Inhibiting, e.g. HIV infection or replication, Raposi's Sarcoma or
lawle pro-laematopoletic activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is the beta-chain of human chorionic gonadotrophin (beta-hCG), peptide derivatives of which are active in inhibiting, e.g. HIV infection or replication or Kaposl's arcoma, or have pro-haematopoletic activity.
                                                                                                                                                                                                                                                                                        Beta-chain; human; chorionic gonadotrophin; beta-hGS; lnhibition;
haman immunodeficiency virus; HIV; infection; replication;
kapoal's astroma, haematopolesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 98.7%; Score 767; DB 19; Length 165; Best Local Similarity 99.3%; Pred. No. 3.8e-62. Metches 139; Conservative 1; Mismatches 0; Indels (
                                                                                                                                                                                                                                                      Human chorionic gonadotrophin beta-chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bryant J, Gallo RC, Lunardi-Iskandar Y;
                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualiflers
1..20
/label- sig_peptide
21..165
/label- mat_peptide
                                                                                                                                              AAW33639 standard; Protein; 165 AA.
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                     97WO-US11202.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960S-070994B.
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N-PSDB; AAV04780.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                            Homo saptens.
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24-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-DEC-1997.
                                                                                                                                                                                  AAW33639;
                                                                                                                                                                                                                                                                                                                                                                                              Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This sequence represents the beta subunit of human chorionic gonadotropin which is used in a method for the treatment or prevention of disease, by increasing production of at least one type of hamatopoletic cell. A method is also described in which non-terminally differentiated hamatopoletic cells are treated in which non-terminally differentiated hamanoceliciency will a KIV) infection, diopathic thrombocycopania purpure, anamala or neutropaenia, or subjects who have undergone chemotherapy or radiation retained. Nor seperably it can be used to there a wide range of conditions involving hamanocpoletic failure, (non-hamatopoletic tumours, autoimmune disease and genetic disorders (using a hransformed hamanocpoletic cell), the in vitro method can also be used to expand hamanocpoletic cell; the in vitro method can also be used to expand hamanopoletic cells for subsequent therapeutic use.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Treating or preventing disease by increasing production of heamtopoietic cells - using human chorionic gonadotrophn or its fragments or derivatives, in vivo or in vitro, e.g. in cases of HIV infection, anaemia etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98.7%; Score 767; DB 19; Length 165;
llarity 99.3%; Pred. No. 3.8e-62;
Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bryant J, Gallo RC, Lunardi-Iskandar Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
                                                                                                                                                                                                                                                                                                      Location/Qualiflers
1..20
/label- signal
21..165
/label- beta-hCG
RESULT 27
AAM47473
ID AAM47473 standard, Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 7; Fig 4; 162pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97WO-US11209.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96US-0709924.
                                                                                                          23-SEP-1998 (first entry)
                                                                                                                                            Human beta-hCG protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1998-076906/07.
N-PSDB; AAV18517.
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Best Local Similarity
Matches 139; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence, 165 AA;
                                                                                                                                                                                                                                                                       domo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-SEP-1996;
24-JUN-1996;
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                                                                         AAW47473;
                                                                                                                                                                                                                                                                                                           Key
Peptide
                                                                                                                                                                                                                                                                                                                                                          Protein
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The invention relates to the production of analogues of a heterodimeric subulit giycoprotein hormone (GPH) a.9, human chorionic gonadotrophin (CC (hCG), human lutefalsing hormone (HEM), human follicle stimulating hormone (HEM), human follicle stimulating hormone (HEM), human follicle stimulating connected to concern the second that the stimulating hormone (HEM), and interioral connected an intersubunit disulphide bond, between an alpha-subunit cystelie and a beta-subulit cystelie, for contain an intersubunit disulphide bond, control in proved stability, the analogue retaining at least a portion of the laproved stability for the corresponding native GPH receptor. This sequence constructive for the corresponding native GPH receptor. This sequence corresponding presents the vill cycle hCG-beta subunit used for the generation of the corresponding present likelihood that the dumer will be formed in vivo and the formed dimer vill here affinity for the native receptors and have considered and cutivities of the hormones. The analogues can have uses
                                                                                                                                           Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chorionic gonadotrophis human iluteinisting hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 DVRFESIRLEGCPRGVNPVVSYAVALSCQCALCRSTTCCGGFKDHPLTCDDPRPQDSSS 121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New stabilised glycoprotein hormones - particularly hCG, hLH, h
or hTSH, have an intestbunkt disulphide crosslink between the
alpha and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 98.6%; Score 766; DB 20; Length 145; Best Local Similarity 98.6%; Pred. No. 4.1e-62. Watches 138; Conservative 2; Mismatches 0; Indels Matches 138; Conservative 2; Mismatches 0.
                                                                                                               Human chorionic gonadotrophin beta subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P.G.
                                                                                                                                                                                                                                                                                 Location/Qualifiers
9.90
23.72
23.72
26.110
34..88
38..57
93.100
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AAW99530 standard; Protein; 145 AA.
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                                                                         08-JUN-1999 (first entry)
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                                                                                                                                                                                                                                                                                    Key
Disulfide-bond
Disulfide-bond
Disulfide-bond
Disulfide-bond
Disulfide-bond
Disulfide-bond
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                                                                                                                                                                                                                                                Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Treating or preventing wasting syndrome - by administration of human chorlonic gonadotropin, beta-hCG, peptides or derivatives of these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence is the beta-chain of human chorionic gonadotrophin (beta-hC), peptide derivatives of which can be used to treat or prevent a wasting syndrome associated with viral infection, e.g. human immunodeficiency syndrome virus infection, enancer, chronic cardiovascular disease, chemotherapy or radiation therapy.
                                                                                                                                                                                                     Beta-chain; human; chorionic gonadotrophin; beta-hCG; treatment; prevention; wasting syndrome; viral infection; cancer; choronic cardiovascular disease; chemotherapy; radiation therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

98.7%; Score £67; DB 19; Length 165;
Best Local Similarity 99.3%; Pred. No. 3.88-62;
Matches 199; Conservative 1; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bryant J, Gallo RC, Lunardi-Iskandar Y;
                                                                                                                                                                       Human chorionic gonadotrophin beta-chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
                                                                                                                                                                                                                                                                                                                                                             1..20
/label- sig_peptide
21..165
/label- mat_peptide
                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                     AAW33637 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 8; Page 69; 126pp; English.
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960S-0669675
                                                                                                                                 26-JUN-1998 (first entry)
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N-PSDB; AAV04779.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-JUN-1997;
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24-JUN-1996;
                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        W09749721-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-DEC-1997.
                                                                                           AAW33637;
                                                                                                                                                                                                                                                                                                                                           Key
Peptide
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               RESULT 29
AAW33637
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AAW99530
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The invention provides movel vaccine compositions which comprise the beta-subunit of human chorionic gonadotropin (betahcfojin combination beta-subunit of human chorionic gonadotropin (betahcfojin combination bitch chicksan-based adjuvants. The vaccines are used to induce a monitorial production. The vaccines compositions are also used for antibody production. The vaccines comprise a well-tolerated chicksan-based adjuvant which induces the production of anti-chorionic gonadotropin antibodies, without inducing the side effects (e.g. hypersensitivity, erpthems, etc.) associated with other adjuvants. The vaccine also overcomes the problem of non-responsiveness in some individuals. The present sequence respersents a betahcg/beta-gal fusion protein consisting of leaderless betahcG linked to a beta-gal fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel human beta-subunit chorionic gonadotropin vaccines used to integrupe fertility in mammals by the immunological inactivation of the pregnancy hormone chorionic gonadotropin
  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                        Human chorionic gonadotropin; hCG; betahCG; vaccine; chitosan; infertility; betahCG/beta-gal; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Watch 98.6%; Score 766; DB 21; Length 176; Best Local Similarity 100.0%; Pred. Wo. Se-62; Mayches 199; Conservative 0; Hismarches 0; Indels
                                                                                                                                                                                                Human betahCG/beta-gal fusion protein.
                                                                                        123 KAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to the production of analogues of a heterodimeric subunit glycoporotein hormone (GH9), and man inteinish promone (GH9), human inteinish operation (GH9), human inteinishing hormone (H99), human inteinishing hormone (H99), human inteinishing mormone (H99), and inteinialing contents, which are modified to contain an intersubunit disuphide bond, between an alpha-subunit cysteine and a beta-subunit opsteine, for improved stability, the analogue retaining at least a portion of the blancous stability, the analogue retaining at least a portion of the corresponding native GHP receptor. This sequence content and an antared MGC-beta subplit used for the generation of the modified GH9s. The improved analogues are designed specifically to theoreoperturbation of the 3-dimensional structure of the hormon, thereby creating greater likelihood that the dimer will be formed in vivo and the formed dimer will have affinity for the native receptors and have agont stabilise the GH9s and prolong as for the native GH9s.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                           Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chorionic gonadotroph; human luteinistim hormone; disulphide bo human follicle simulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
61 DVRFESIRLPGCPRGVNPVVSYAVAISCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 98.6%; Score 766; DB 20; Length 165; Best Local Similarity 99.3%; Pred. No. 4.6e-62; Matches 139; Conservative 0; Mismatches 1; Indels 0; Gaps 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 SKEPLRFRCRPINATLAVERESCPVCITVRTTICÄGYCFTHTRULGGVLPALPOVVCNÅR 61
21 SKEPLRFRCRPINATLAVERESCPVCITVRTTICGGFCPTHTRULGGVLPALPQVVCNR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New stabilised alycoprotein hormones - particularly hCG, hLR, hFSH or hTSH, have an intersubunit disulphide crosslink between the athar and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                  Glycoprotein hormone analogue hCG-beta-A35C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISTE ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 12; Page 89; 139pp; English.
                                                                                                                                                                                                      AAW99508 standard; Protein; 165 AA.
                                         25-JUN-1998; 98WO-US13070.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-JUN-1997; 97US-0050784.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W09858957-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-DEC-1998.
                                                                                                                                                                                                                                               AAW99508;
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146 KAPPPSLPSPSRLPGPSDT 164

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61 DVRFESIRLPGCPRGVNPVVSYAVALSCMCALCRRSTTDCGGPKDHPLTCDDPRFQDSS 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequence is an analogue of mature hCG beta subunit having residue 89 replaced by a methonine residue. This introduces an additional cleavage site for CWBF, useful for determining the disulphide bonds. This can be used to show that mutagenesis has not altered the "normal" disulphide pettern of examining protein folding.
                                                                               Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as fimuno-costration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 98.5%; Score 765; DB 12; Length 145; Best Local Similarity 99.3%; Pred. No. Se-62; Mesthes 139; Conservative 0; Mismatches 1; Indels Matches 139; Conservative 0; Mismatches 14; Indels
                                      hCG methionine substitution mutant, G3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hCG histidine substitution mutant, G5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR15173 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                                 91WO-US03162.
                                                                                                                                                                                                                                                                                       90US-0520703.
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11-FEB-1992 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                      Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 145 AA;
                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                              07-MAY-1991;
                                                                                                                                                                                                                                                                                       08-MAY-1990;
                                                                                                                                                                                                          14-NOV-1991.
                                                                                                                                                                 WO9116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention provides movel vaccine compositions which comprise the beta-subunit of human chorionic gondotropin (betahcofin combination with chicosan-based adjuvants. The vaccines are used to induce infertility especially transient infertility, in female mammals. The compositions are also used for antibody production. The vaccines comprise a well-tonerated chicosan-based adjuvant which induces the production of anti-chorionic gonadotropin antibodies, without inducing the side effects (e.g. hypersensitivity, erythma, etc.) associated with other adjuvants. The present sequence represents a betahof fragment individuals. The present sequence represents a betahof fragment fused to an alpha-mating factor leader sequence at the Neterminus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel human beta-subunit chorionic gonadotropin vaccines used to interrupt fertility in mammals by the immunological inactivation of the pregnancy hormone chorionic gonadotropin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63 VRFSSIRLGGCRGVNPVSSVAALSCQCALCRRSTTDCGGFROHPLTCDDPREQDSSSS 122
161 VRFSSIRLGGCPGGVNPVSSVAALSCQCALCRRSTTDCGGFROHPLTCDDPREQDSSSS 220
161 VRFSSIRLGGCPGGVNPVSSVAALSCQCALCRRSTTDCGGFROHPLTCDDPREQDSSSS 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                     Human chorlonic gonadotropin; hCG; betahCG; vaccine; chitosan; infertility; betahCG/beta-gal; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Watch 99.6%; Score 766; DB 21; Length 252; Best Local Similarity 100.0%; Fred, Wo. 7.2e-62; Watches 139; Conservative 0; Mishatches 0; Indels (
                                                                                                                                                         Alpha-mating factor fragment/betahCG fusion protein.
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AAR15171
ID AAR15171 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 5; Page 34-35; 39pp; English.
                                   AAY57316 standard; Protein; 252 AA.
                                                                                                                                                                                                                                                                                                                                                                                          99WO-US21591.
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                                                                                                                19-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Harris J, Martinez M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-271258/23.
N-PSDB; AAZ90610.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         252 AA;
                                                                                                                                                                                                                                                                                                       WO200015253-A1.
                                                                                                                                                                                                                                                                                                                                                                                       16-SEP-1999;
                                                                                                                                                                                                                                                                    Homo sapiens.
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                                                                               AAY57316;
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(MCIN-) MCINNIS P G.

14-NOV-1991.

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the invention relates to the production of analogues of a heterodimeric subunit giyosoprotain hormone (GH9) a.9. human individue gonadotrophin (hCG), human inteinising hormone (HH9), human follicle stimulating hormone (HH9), human inteinishing hormone (HH9), human follicle stimulating hormone (HH9), human inteinishing hormone (HH9), and inteinishing more decision of the contain an intersubunit disuphide bond, between an alpha-subunit cysteine and a beta-subunit cysteine, for the containing at least a portion of the chaptored stability, the analogue retaining at least a portion of the chaptored stability. The improved analogues are designed specifically to confided GH9. The improved analogues are designed specifically to compete pretarbation of the 3-dimensional structure of the hormon, thereby creating greater likelihood that the dimer will be formed dimer vill have affinity for the native receptors and have and the blongistic activity on them. The changes stabilise the GH9s and prolong as for the native GH9s and prolong as for the native GH9s.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98.5%; Score 765; DB 20; Length 165;
99.3%; Pred. No. 5.7e-62;
Live 0; Mismatches 1; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New stabilised glycoprotein hormones - particularly hCG, hLM, hFSH or hTSH, or n intersubult disturbhide crosslink between the alpha-and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone analogue hCG-beta-V56C.
                                                                                                                                                                                                                                                                       Example 12; Page 89; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW99507 standard; Protein; 165 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 99.31
Matches 139; Conservative
                                                                                                      WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 165 AA;
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                                                   Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence is an analogue of mature hCG beta subunit having residue 37 replaced by a histidina residue. This introduces an additional cleavage site for CNBr, useful for determining the disulphide bonds. This can be used to show that mutagenesis has not altered the "ormal" disulphide pattern of analogues, and for seamining protein folding.
                                                                                                                                                                                                                                                                                                                                                New qlyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glycoprotein hormone analogue hCG4beta-V44C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW99514 standard; Protein; 165 AA.
                                                                     07-MAY-1991; 91WO-US03162.
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                                                                                                                                                                                   (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                            90US-0520703.
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                                                                                                                                                                                                                                  Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 145 AA;
                                                                                                                            08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
Synthetic.
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The invention relates to the production of analogues of a heterodimeric subunit glycoprotein hormone (GRH) e.g. human chiritonic gonadetropin (hCG), human luteinising hormone (HLH), human follicle stimulating conformation of hormone (hESH), human thyroid atmusting hormone (hTSH), and functional muteting, which are modified to contain an intersubunit dissiphide bond, between an alpha-subunit cysteine, for the purposed stablity, the analogue retaining at least a portion of the improved stablity, the naniogue retaining at least a portion of the corresponding native GPH receptor. This sequence represents a mutated hOC beta subunit used for the generation of the condition of the subulity of the orter analogue are designed specifically to reduce perturbation of the 3-dimensional structure of the hormone, therefore dimer will have affinity for the native receptors and have adout the formed dimer will have affinity for the native receptors and have the biological activities of the hormones. The analogues can have uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTCCAGYCPTMTRVLQGVLPALPQVVCNTR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 SKEPLRPRČRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                   New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH or hFSH, have an intersubmunit disublished ecrossink between the alpha- and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98.5%; Score 765; DB 20; Length 165; 99.3%; Pred. No. 5.7e-62; tive 0; Mismatches 1; Indels (
                                                                (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hCG methionine substitution mutant, GI.
                                                                                                                                                                                                                                                                                                                                Example 12; Page 89; 139pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR15169 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141 SKAPPPSLPSPSRLPGPSDT 160
                      25-JUN-1997; 97US-0050784.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 99.39
Matches 139; Conservative
                                                                                                                                                                                      WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W09116922-A.
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                                                                                                                                         Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15169;
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                                                                                                                                                                                                                                                                                                                      the invention relates to the production of analogues of a heterodimeric subunit giyosoprotein hormone (GPH) a.9. Awam chorionic gonadortropin cabbunit giyosoprotein hormone (GPH), haman internising hormone (HPH), haman fullicle stimulating hormone (HPH), haman internising hormone (HPH), haman fullicle stimulating content of the color of the content an intersubunit disamphide bond, between an alpha-subunit cysteine and a beta-subunit cysteine, for the content an intersubunit disamphide bond, between an alpha-subunit cysteine and a beta-subunit cysteine, for the content of the analogue retaining at least a portion of the bloometivity for the corresponding native GPH receptor. This sequence corresponding an autored MGG-beta subunit used for the generation of the modified GPHs. The improved analogues are designed specifically to the reduce perturbation of the 3-dimensional structure of the hormone. Teadure perturbation of the 3-dimensional structure of the hormone. Condition of the subunit used that the dimer will be formed in vivo and the formed dimer vill have affinity for the native receptors and have uses as for the native GPHs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chortonic gonadotropin; human luteinising hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       es 119: Conservative 0; Mismatches 1; Indels 0; Gaps 2 SKEPLAPRCRPINATLAVEKEGCPVCIIVWTTICAGYCPTWTRVLGGVVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLOGVLPALPQVCCNYR 80
                                                                                                                                                                                   New stabilised glycoprotein hormones - particularly hCG, hLH, 1
or hTSH, have an infersubunit (laiuphide crosslink between the
alpha and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98.5%; Score 765; DB 20; Length 165; 99.3%; Pred. No. 5.7e-62; Live 0; Mismatches 1; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glycoprotein hormone analogue hCG-beta-I33C.
                (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                Example 12; Page 89; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW99509 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141 SKAPPPSLPSPSRLPGPSDT 160
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 98.55
Best Local Similarity 99.35
Matches 139; Conservative
                                                                                                                                      WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 165 AA;
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Synthetic.
                                                                                         Moyle WR;
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chorionic gonadotropin; hCG; hormone; glycoprotein; tumour; beta-subunit; stapinies specific; metalloprotease; binding assay; detection; prognosis; gonadotropin beta-subunit nicking enzyme; GBNE; phenanthroline; prognadotropin beta-subunit nicking enzyme; GBNE; phenanthroline; propeptin; cervical cancer; endometrial cancer; varian cancer; prostate cancer; usaticular cancer; tubal cancer; uterine cancer; vaginal cancer; vulvar cancer; reproductive cancer; therapy; screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence is that of the beta-subunit of human chorionic gonadorrophin which was used in the creation of a beta subunit peptide analogue as part of an alpha, beta-heterodimeric polypeptide having an affinity to vartebrate inteinising hormone (IR) receptors and vertebrate follicle stimulating homone (FSH) receptors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 SKEPLRPRCRPINATLAVEKEGCPVCITVNITICAGYCPTMTRVLQCVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
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/label- hcd
/note- *partial sequence of chorionic gonadotropin
beta subunit*.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          98.3%; Score 764; DB 14; Length 145; 99.3%; Pred. No. 6.2e-62; Live 0; Mismatches 1; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human chortonic gonadotropin beta subunit.
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1..146
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                                       Disclosure; Page 20; 98pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 41
AAW31200
ID AAW31200 standard; protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 99.39
Matches 139; Conservative
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Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hGG; glycoprotein hormone analogue; human infertility; LH; FSH;
lutelinfish hormone receptor; follicle stimulating hormone receptor;
vertebrate; polycystic ovarian disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New alpha, beta-hetero:dimeric polypeptide derivs. - which bind to tutefinising and follicle stimulating hormone receptors, useful for controlling the ratio of FSH to LH activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                              The sequence is an analogue of mature hCG beta subunit having residues 12 and 27 replaced by methonine residues. This introduces additional cleavage sites for CNBr, useful for decembing the dissiphide bonds. This can be used to show that mutageness has not a leered the 'normal' dissiphide pattern of managemes, and for examining protein folding.
                                                                                                                                                                                                                                         New glyco-protein hormone analogues - for inducing fertility a
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Watch 98.31; Score 764; DB 12; Length 145; Best Local Similarity 98.64; Pred. No. 6.2e.62; Matches 138; Conservative · 2; Mismatches 0; Indels Matches 138; Conservative · 2; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                             Table VIII; Page 67; 94pp; English
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                             (UYNE-) UNIV MED NEW JERSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-MAY-1993 (first entry)
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                                                                                              Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1993-018070/02.
                                                                                                                                                                        WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 145 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09222568-A.
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The invention relates to the production of analogues of a heterodimeric subunit giyosototein hormone (GPH) a.9. human chorionic gonadotropin (bCC), human intentials pormone (HMH), human chorionic gonadotropin (c (bCG), human intentials pormone (HMH), human follicle stimulating bormone (HMH), human follicle stimulating companies of the color of the contain an intersubunit disupplide bond, between an alpha-subunit cysteine and a betware subunit cysteine, for c improved stability, the analogue retaining at least a portion of the chapter stability to the corresponding native GPH receptor. This sequence conceptuals a matated hord-betware subunit cysteine of the conceptual and the conceptual analogue sare designed specifically to compare the conceptual analogue are designed specifically to compare the conceptual and the formed dimer vill have affinity for the native receptors and have considered analogues stabilise the open conceptual activity on them. The changes stabilise the GPHs and prolong the bloogical activities of the hormones. The analogues can have uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Analogue; hèterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chorionic gonadotropin; human luteinising hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

Q8.31, Score 764; DB 20; Length 165;
Best Local Similarity 99:31, Pred. No. 7.1e-62.

Matches 139; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glycoprotein hormone analogue hCG-beta-M41C.
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                      Example 12; Page 89; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW99506 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 SKAPPPSLPSPSRLPGPSDT 141
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Synthetic.
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         This protein sequence represents the beta-subunit of human chorionic goadcorpoin (NGS) which can be used in a novel method for detecting conductive cancers and associated tumours. NGC is a dimeric giveductive cancers and associated tumours. NGC is a dimeric giveductive tumours in both men and women. The hGC beta-subunit can reproductive tumours in both men and women. The hGC beta-subunit can can aprilnie specific metalloprocease capable of cleaving the hGC beta subunit at Arg44 or Gly47, but is partially inhibited by phenanthroline or leupeptin. Over 90 per cent of cancer patients show elevated levels of GRNE are useful in the detection and prognosis of cervical, conformation of GRNE are useful in the detection and prognosis of cervical, oversul in the detection and prognosis of cervical, conformation of GNNE are useful in the detection and prognosis of cervical, oversulantly and prognosis of cervical, conformation of GNNE are useful in the detection and prognosis of cervical, conformation of differential diagnosis of benign versus malignant cancers and can also be differential diagnosis of benign versus malignant cancers and can also be used to follow therapy for the treatment of known reproductive cancers.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 98.3%; Score 764; DB 18; Length 145; Best Local Similarity 98.6%; Pred. No. 6.2e-62; Indels Watches 138; Conservative 2; Hismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLGCVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 61
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or hTSH, have an intersubunit disuiphide crosslink between the
alpha and beta subunits to improve stability
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                                                                                                                                                                                                                                                                                                                                                                                                                                 145 AA;
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Synthetic.
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the invention relates to the production of analogues of a heterodimeric subunit giyosoprotein hormone (GFR) = 9. human chorionic gondedtropin (bCG), human intendising hormone (HER), human follicle stimulating hormone (HER), human follicle stimulating hormone (HER), human follicle stimulating connections of the contending the stimulating hormone (HER), and functional muterins, which are modified to contend an intersubunit disupplie bond, between an alpha-subunit cysteine and a beta subunit of setting bond, between an alpha-subunit cysteine and a beta subunit cysteine, for chaptored stability, the analogue retaining at least a portion of the hormonial controlled GFRs. The improved analogues are designed specifically to contend presents a material MCG-beta subunit used for the generation of the contended analogues are designed specifically to the creduce perturbation of the 3-dimensional structure of the hormone and the formed dimer will have affinity for the native ceptors and have as for the native GFRs and prolong the hologolan activities of the hormones. The analogues can have uses
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                        New stabilised glycoprotein hormones - particularly hCG, hLM, lor hTSF, have an interstubunt dissiphinge crosslink between the alpha and beta-subunits to improve stability
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98.31, Score 764; DB 20; Length 165;
Best Local Similarity 99.31, Pred. NO. 7.1e-62,
Matches 319; Conservative 0; Mismatches 1; Indels (
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                                                                                                                   Example 12; Page 89; 139pp; English.
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Synthetic.
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AAW99511
ID AAW999
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                                                                                                 The invention relates to the production of analogues of a heterodimeric subunit giycoprotein hormone (GPHS). Howan intentials hormone (PHS), haman intentials hormone (PHS), haman intentials hormone (PHS), haman intentials hormone (HHS), haman follicle stimulating hormone (HHS), haman intentials had functional contents, which are madified to contain an intersubunit disuphide bond, between an alpha-subunit cysteine and a beta-subunit cysteine for contain an intersubunit disuphide bond, contains the proved stability, the analogue retaining at least a portion of the blackord stability, the analogue retaining at least a portion of the content and the copy of the corresponding native GPH receptor. This sequence contains a matared McG-beta subunit used for the generation of the content and provided analogues are designed specifically to the creduce perturbation of the 3-dimensional structure of the hormon of the content of the dimer will be formed in vivo and the formed dimer will have affinity for the native ecceptors and have seen to all the content of the structure of the stability of the GPHS and prolong the Allongors the Allongors and have uses
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or hTSH, have an intersubunit disulphide crosslink between the alpha- and beta-subunits to improve stability
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99.3; Score 764; DB 20; Length 165;
Pred. No. 7, 14-62;
Matches 139; Conservative 0; Mismatches 1; Indels (
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                                                               Example 12; Page 89; 139pp; English.
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Synthetic.
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The sequence represents the amino acid sequence of gonadotropin analogue beta subunit lacking oligosaccharide binding sites. The oligosaccharide binding sites are removed in order to reduce the efficacy of the conditions sites are removed in order to reduce the efficacy of the conditions of the conditions of the conditions of the sites of the discontinuous of conditions of the hormone analogue is useful for generating antibodies specifically commone analogue is useful for generating antibodies specifically commone analogue is useful for generating antibodies specifically commone analogue is useful for generating to the resolution to the represent of infertility, as an aid for in civiv fertilisation techniques, and in other therspeutic methods associated with the native hormone. The single chain procein is further useful as a reagent in a manner similar to the heterodimer as a useful singular the process of antibodies with respect to the native proteins in the bological samples, as control reagent in assay this proteins in the bological samples, as a control reagent in assay of the should make the native hormones blud. In detecting and purityly receptors to which the native hormones blud. In detecting and purityly receptors to which the native hormones blud. Con assessing the levels of these objects in the provide an alternate following advancages over their inferior forms: they are more stable, conclinant production are reduced since only a single gene is needed to transcribe, translate and process, they provide an alternate forms which permitting fine tuning of scritily levels and of In vivo half lives. Single chain forms are unique starting materials for identifying the cuming sequence of the subunits permitty of the dimer. The linkage between the subunits permitts the protein to be engineered without disturbing the
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                                                                                                                                                                                                                                                                             New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds in treating infertility, or as aids for in vivo fertilization techniques
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 16; Fig 16; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAE04485 standard; Protein; 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-SEP-2001 (first entry)
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Best Local Similarity 99.39
Matches 139; Conservative
                                                          (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                      WPI; 2001-424301/45.
N-PSDB; AAS08507.
                                                                                                                            Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 181 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAE04485;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   οp
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                                                                                                                                                                                                                                                                     The invention relates to the production of analogues of a heterodimeric subunit giycoportein hormone (GPH) a.g. human chorionic gonadorropin (hCG), human internising hormone (HEH), human follicle stimulating hormone (HEH), human follicle stimulating content of the content of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 SKEPLRPRCRINATLAVEKEGCPVCITYNATICAGYCPAMTRULGGULPALPQVVCNYR 61
11 SKEPLRPRCRINATLAVEKEGCPVCITYNATICAGYCPCMTRVLGGVLPALPQVVCNYR 11
11 SKEPLRPRCRINATLAVEKEGCPCTTVWTICAGYCPCMTRVLGGVLPALPQVVCNYR 11
11 SKEPLRPRCRINATLAVEKEGCPCTTVWTICAGYCPCMTRVLGGVLPALPQVVCNYR 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels 0; Gaps
                                                                                  New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH or hTSH, have an intersubult dislubplide cossilink between the atphar and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; glycoprotein hormone; infertility; in vivo fertilisation;
single chain gonadotropin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 98.3%; Score 764; DB 20; Length 165; Best Local Similarity 99.3%; Pred. No. 7.14-62. Matches 13; Conservative 0; Mismatches 1; Indels 0 Matches 12; Conservative 0; Mismatches 11; Indels 0
                                                                                                                                                                                                                   Example 12; Page 89; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gonadotropin analogue, beta subunit<sub>i</sub>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAU04613 standard; Protein; 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              970S-0918288.
940S-0199382.
940S-0289396.
940S-0310590.
940S-0351591.
950S-0475049.
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                        WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US6242580-B1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-AUG-1997;
18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-JUN-2001.
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8 ò 0; Gaps

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61 DVRFESIRLPGCPRGVRPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence is an analogue of mature hCG beta subunit having residue 40 replaced by a histidine residue. This introduces an additional cleavage site for CNBr, useful for determining the distiphide bonds. This can be used to show that mutagenesis has not altered the "normal" distiphide pattern of analogues, and for see AARISO43, AARISO61-RISI2S and AARIS161-RISI99.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                         Glycoprotein hormone; human chorlonic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 99.2%; Score 763; DB 12; Length 145; Best Local Similarity 99.3%; Pred: No. 7.6e-62; Marches 199; Conservative 0; Mismatches 1; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hCG methionine substitution mutant, G2.
                                                                                                                                                                                                                                                                                                                                                                hCG histidine substitution mutant, G6.
                                                                                                                                                          AAR15174 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Table VIII; Page 67; 94pp; English.
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                                                                                                                                                                                                                                                                                              11-FEB-1992 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9116922-A.
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                                                                                                                                                                                                                            AAR15174;
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                                                                                                RESULT 48
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to human single chain forms of the glycoprotein character which is an agoils to antagonist of intensising hormone ([M]), follocie stimulating hormone ([M]), and the stimulating hormone ([M]), and the stimulating hormone ([M]), and the stimulating hormone is the stimulating hormone set used in tractal in the introverse and other therapeutic methods so associated with the native hormones are useful as reagents in a manner similar to heterodimers, as diagnostic tools to detect the presence of antibodies with respect to the native proteins in both the same of antibodies with respect to the native proteins to both occited an amplies, as control respects to which the native hormones blind the single chain hormones are also used in affinity chromatographic preparation of receptors or antibodies. They are used as purification tools for antibodies they are used as purification tools for antibodies are also used in affinity chromatographic preparations of these materials and to monitor levels of subsequent preparations of these materials and to monitor levels of subsequence is human single chain normones and the subsequence is human single chain open compounds, as substitutes for the heterodimeric forms of beta-subunit coding region law of living serves as substitutely fusion protein and so analogy is 10.10 a. The analogys areves as useful starting compounds for analogy areves as useful starting compounds for sequence. The humans in the hormones of hormones are subunit to define region as an analogy as useful starting compounds for sequence the humans.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LINETALING TRAN encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
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99.3%; Score 764; DB 22; Length 191;
Best Local Similarity 99.3%; Pred. NO. 7,8e-62;
Maches 139; Conservative 0; Mismarches 1; Indels (Matches 139; Conservative 0; Mismarches 1); Indels (Matches 139; Conservative 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 16; Fig 16; 87pp; English.
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940S-0289396.
940S-0310590.
940S-034628.
940S-0351591.
950S-0475049.
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N-PSDB; AAD08807.
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                                                                                                                                                                                                                                                                                                                    18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1995;
                              Homo saplens.
Synthetic.
                                                                                                                           US6238890-B1.
                                                                                                                                                                                                                                                           25-AUG-1997;
                                                                                                                                                                                             29-MAY-2001.
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Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chorionic gonadorropic; human luteinising hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 SKEPLRPCCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 SKEPLAPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLAGGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98.1%; Score 762; DB 20; Length 165; 99.3%; Pred. No. 1.1e-61; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glycoprotein hormone analogue hCG-beta-Q46C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW99513 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141 SKAPPPSLPSPSRLPGPSDT 160
        98WO-US13070.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 98.1
Best Local Similarity 99.3
Matches 139; Conservative
        25-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09858957-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The sequence is an analogue of mature hCG beta subunit having residue 37 replaced by a methonina residue. This introduces an additional cleavage site for CMBC, useful for determining the disulphide bonds. This cam be used to show that muragenesis has mot altered the 'normal' disulphide pattern of analogues, and for see AMR15043. AMR19061-R15128 and AAR15161-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Owery Match
Owery Match
Best Local Similarity 99.34; Pred. No. 9,44-62;
Bast Local Similarity 99.34; Pred. No. 9,44-62;
Bast Local Similarity 99.34; Pred. No. 9,44-62;
Best L
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Table VIII; Page 67; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hCG-beta analogue hCG-beta-R8C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                       90US-0520703.
                                                                                                                                                                                                                                                            91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 145 AA;
                                                                                                                                                                                                                                                        07-MAY-1991;
                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                       08-MAY-1990;
                                                                                                                                                                                         14-NOV-1991.
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                                                                                                                         WO9116922-A.
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Synthetic.
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The invention relates to the production of analogues of a heterodimeric should give joint and mobility of gonadotropin (GPH) and intentially homen (GPH) as 9, human inchiolate gonadotropin (hCG), human lutefallaing hormone (hEH), human follicle stimulating hormone (hEH), human future and the stimulating more of the contain an intersubunit disupphide bond, between an alpha-subunit cysteine and a beta subunit cysteine and a beta subunit opsteine, for contain an intersubunit disupphide bond, between an alpha-subunit cysteine and a beta subunit cysteine for contain an intersubunit disupphide bond, contained the subunit used to be portion of the bioportivity for the corresponding native GPH receptor. This sequence contained a mutated hGC-beta subunit used for the generation of the contained analogues are designed specifically to contain the formed analogues are designed specifically to the creduce perturbation of the 3-dimensional structure of the hormone contained dimer vill have affinity for the native receptors and have asset as for the native GPHs and prolong the hollogical activities of the hormones. The analogues can have uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human depriosic goradotropin; human luterinising hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
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or hTSH, have an infestbundt disuphide crosslink between the
alpha and beta-subunits to improve stability
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90.11; Score 762; DB 20; Length 165;
Best Local Similarity 99.31; Pred. No. 1.1e-61.
Matches 13; Conservative 0; Mismarches 1; Indels (
                                                                                                                                                                                                                                                                                                      (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 12; Page 89; 139pp; English.
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                                                                                                                                                              25-JUN-1998;
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                                                                                               30-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                          Moyle WR;
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AAM99534
LD AAM99534
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AC AAM995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     As The invention relates to the production of analogues of a heterodimeric subunit giycoportein hormone (GPH) = 9. human chorionic gondocropin (hCG), human inteinishing hormone (HER), human inteinishing hormone (HER), human chicles stimulating hormone (HER), human thyrotod stimulating hormone (HER), and functional muteins, which are modified to contain an intersubunit disuphide bond, between an alpha-subunit cysteine and a beta-subunit gysteine, for the corresponding artice GPH receptor. This sequence bloadtivity for the corresponding artice GPH receptor. This sequence corresponds a matched hord-beta subunit used for the generation of the modified GPHs. The improved analogues are designed specifically to corresponding article GPH receptor. This sequence ceduce perturbation of the 3-dimensional structure of the hormone, thereby creating greater likelihood that the diener will be formed in vivo and the formed dimer vill have affinity for the native receptors and have segment and prological activities of the hormones. The analogues can have uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       New stabilised glycoprotein hormones - particularly hCG, hLH, h
or hTSH, have an intersubunit disulphide crosslink between the
alpha- and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match 99.1%; Score 762; DB 20; Length 165; Best Local Similarity 99.3%; Pred; No. 1.1a-61; Matches 139; Conservative 0; Mismatches 1; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycoprotein hormone analogue hCG-beta-054C.
                                                                                                                                                                                                                         (ISTE ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 12; Page 89; 139pp; English.
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                                                                                      25-JUN-1998;
                                                                                                                                                     25-JUN-1997;
                      30-DEC-1998.
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Synthetic.
                                                                                                                                                                                                                                                                                                                                 Moyle WR;
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The invention relates to the production of analogues of a heterodimeric subunit giyosoprotein hormone (GPB) = 9. Numan chorionic gonadotropin (CC (NCO), human luteinishing hormone (HER), human follicle stimulating hormone (HER), human follicle stimulating hormone (HER), human follicle stimulating hormone (HER), human functional cauteins, which are modified to contain an intersubunit disulphide bond, between an alpha-subunit cysteine and a beta-subunit cysteine, for the contact and part of the machine of the contact and the contact dimensional structure of the hormone, the shologistic activity on them. The changes stabilise the GPHs and prolong as for the native GPHS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTfDGGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH or hTSH, have an intersubunit disulbande crosslink between the alpha and beta-subunits to improve stability
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97.9%; Score 761; DB 20; Length 165; 99.3%; Pred. No. 1.3e-61; Live 0; Mismatches 1; Indels (
stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                   (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
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                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure, Flg 15B; 139pp; English.
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Best Local Similarity 99.3%
Matches 139; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 165 AA;
                                    Homo sapiens.
Synthetic.
                                                                                                                                                                                                 25-JUN-1997;
                                                                                                                                                               25-JUN-1998;
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                                                                                                                           30-DEC-1998.
                                                                                                                                                                                                                                                                                           Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11 SKEPLRPRCRPINATIAVEKEGCPVCITVNTTICAGCCPTWTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels 0; Gaps
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                                                                                                                                                                                                                                                                                                                        New stabilised glycoprotein hormones - particularly hCG, hLH, P
or hTSH, have an intestabunit disulphide crosslink between the
alpha - and beta-subunits to improve stability
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                                                                                                                                                                                               (ISTE ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
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                                                                                                                           98WO-US13070.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 165 AA;
                                                                                                                      25-JUN-1998;
                                                W09858957-A2.
Homo sapiens.
Synthetic.
                                                                                       30-DEC-1998.
                                                                                                                                                                                                                                                      Moyle WR;
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0; Gaps

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Analogue la (human CG-beta(1-145)-linker-human CG-alpha(1-92)[N530, N780]) is a specific example of a single chain gondotrophn having ar chorionic gondotropin (CG) beta-subunit at the N-terminus and a CG alpha-subunit at the C-terminus, joined by a linker of 1-16 amino acids. The analogue la was derived from qanalogue lay removing the two 91ycosylation sites from the alpha-subunit. The analogue has anti-luteinising hormone (lutropin) activity and can be used for facilitating ovulation, terminating pregnancy and reducing androgen secretion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                    Misc-difference 351
/note= "wild-type Asn at position 78 of the alphashorter and the subunit has been replaced by Gin to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                              /note= "wild-type Asn at position 52 of the alphasubunit has been replaced by Gln to remove a glycosylation site"
                                 Single chain gonadotropin; human chorionic gonadotropin; hCG; alpha; beta; subunit; analogue; glycoprotein hormone; fertility; inhibit; stimulate; increase; lutropin; luteinising hormone; LH; follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of strength atting slycospotein hormones having lutropin activity
    Partially deglycosylated single chain gonadotropin analogue la.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97.9%; Score 761; DB 16; Length 265;
99.3%; Pred. No. 2.1e-61;
tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                    /label- linker
174..265
/label- Gonadotropin_alpha_subunit_(1-92)
                                                                                                                                                                                                                                   /note- "Arg corresponds to CCG codon"
166..173
                                                                                                                                        Location/Qualifiers
1..20
/label-leader
21..165
/label- hCG_beta_subunit_(1-145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 23; Fig 18; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9405-0199382.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 97.9
Best Local Similarity 99.3
Matches 139; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1995-302553/39.
N-PSDB; AAT03243.
                                                                                                                                                                                                                                                                                                                  Misc-difference 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 265 AA;
                                                                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9522340-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-AUG-1995.
                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Moyle WR;
                                                                                                                                            Key
Peptide
                                                                                                                                                                                                                                                                                 Region
                                                                                                                                                                                                                                                      Region
                                                                                                                                                                                          Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Analogue I (human CG-beta(1-145)-linker-human CG-alpha(1-92)) is a specific example of a single chain gondourcpub naving a chorionic gonaddurcopin (CG) beta-subunit at the N-terminus and a CG alpha-subunit at the C-terminus, joined by a linker of 1-16 amino acids. The analogue has lutelisizing hormone (lutropin) activity and is useful for inducing ovulation and increasing male fertility.
alpha: beta; subunit; analogue; gjycoptotein hormone; fertility;
inhibit; stimulate; increase; lutropin; luteinising hormone; L#;
follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            wethods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating slyco-protein hormones having lurropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97.9%; Score 761; DB 16; Length 265; 99.3%; Pred. No. 2.1e-61; Live 0; Mismatches 1; Indels (
                                                                                                                                                                                    //note= "Arg corresponds to CCG codon"
166.171
//label=1linker
//label=60nadotropin_alpha_subunit_(1-92)
                                                                                                 1..20
/label= leader
21..165
/label= hCG_beta_subunit_(1-145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 12 and Claim 39; Fig 6; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                          94US-0199382.
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Best Local Similarity 99.31
Matches 139; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1995-302553/39.
N-PSDB; AAT03212.
                                                                                                                                                                                                                                                                                                                                                                                                     (SENS-) SENSI-TEST.
                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                               W09522340-A1.
                                                                                                                                                                                                                                                                                                                                           17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                        18-FEB-1994;
                                                                                                                                                                                                                                                                                                              24-AUG-1995.
                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                           Key
Peptide
                                                                                                                                          Region
                                                                                                                                                                                                    Region
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The sequence is an analogue of mature hCG beta subunit having residues 95 and 97 replaced by the corresponding residues in the bovine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agonist and/or antsee ARRISO43, AARISO61-R15125 and AARISO61-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                  Glycoprotein hormone; Immuno-castration;
immuno-contragestive; vaccine, human chorionic gonadotropin;
limelnising hormone; LH; GG; bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 97.74; Score 759; DB 12; Length 145; Best Local Similarity 98.64; Pred. No. 1.8e-61. Matches 138; Conservative 1; Mismarches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Glycoprotein hormone; immuno-castration;
Immuno-contragestive, vaccine; human chorionic gonadotropin;
luceinising hormone; LH: GG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR15120 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Table IV; Page 63; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                               91WO-US03162.
11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1991-353528/48.
                                                      hcg/blH chimera, D7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hCG/hLH chimera, A5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                               07-MAY-1991;
                                                                                                                                                                                                                        Homo saplens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                           14-NOV-1991.
                                                                                                                                                                                                                                                                                                    WO9116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 DVRFESIRLPGCPRCVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 SKEPLRPRCRPINATLAVEKEGCPVCITVNITICAGYCPTMTRVLOGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequence is an analogue of mature hGG beta subunit having residues 199-144 replaced by histidine residues. This introduces additional cleavage sites for GNE, useful for determining the disulphide bonds. This can be used to show that mutagenesis has not altered the "ormal" disulphide pattern of analogues, and for See AMRISO41, AMRISO61-RISI25 and AMRISO61-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New glyco-protein hormone analogues - for inducing fertility as
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 97.74; Score 759; DB 12; Length 144; Best Local Similarity 100.04; Pred. No. 1.70-61; Matches 138; Conservative. 0; Mismatches 0; Indels (Matches 188; Conservative. 0
                                                                                                                                                                                                                                                                                                                                                                              hCG histidine substitution mutant, G10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 58
AAR15103
ID ARRIS103 standard; Protein; 145 AA.
XX ARRIS103;
AC AAR15103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                             AAR15178 standard; Protein; 144
                  90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 SKAPPSLPSPSRLPGPS 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 SKAPPPSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                       11-PEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 144 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo saplens.
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The sequence is an analogue of mature hoc bets subunit having a histidine and a glumanne residue residue inserted between testings and so the season of the second of the season of the 
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61 FRUNRESIRLPGCPRGVNPVVSTAVALSCQCALCRSTTDCGRROHPLTCDDPRFQDS 120
61 FRUNRESIRLPGCPRGVNPVVSTAVALSCQCALCRSTTDCGRROHPLTCDDPRFQDS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Smilarity 98.64; Pred. No. 1.8e-61.
Matches 140; Conservative 0; Mismatches 0; Indels 2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human: chorionic gonadotrophin; chorionic gonadotropin; beta-hCG; beta subunit; amino-terminal loop; mutant: reduction; LH: vaccine; contragestative medicament; cross-reactivity; luteinising hormone; contraceptive; fumnunossay; Kaposi sarcoma; inhibition; neutralising antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chorionic gonadotrophin beta subunit amino-terminal loop mutant.
                                                            New glyco-protein hormone analogues - for inducing fertility a immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    note- "wild type Val replaced with Tyr"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key Location/Qualiflers
Misc-difference 25
                                                                                                                                                                                                    Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW27682 standard; protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Delves PJ, Lund T, Roitt IM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-JUL-1996; 96WO-GB01717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95GB-0014816.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
    WPI; 1991-353528/48.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1997-132639/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 147 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 61
AAN27682
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequence is an analogue of mature hCG beta subunit having residues 47, and 51 replaced by the corresponding residues in the human Lip protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in make and female animals.

See AARISO43, AARISO61-RIS123 and AARIS161-RIS198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New 41yco-protein hormone analogues - for inducing fertility as 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR15175 standard; Protein; 147 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Table VI; Page 65; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                            Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 145 AA;
                                                                                                                                                            07-MAY-1991;
                                                                                                                                                                                                                         08-MAY-1990;
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                                                                                           14-NOV-1991.
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AAR1517
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The present sequence is the human chorionic gonadotrophin beta cabbair to cabbay reteminal loop mutant ArgisGiu, which can be used in the preparation of a contragestative medicament. The modified beta-hCG has reduced cross reactivity with literinishing hormone (LH), as defined by the ability of both proteins to react with the same antibody. The modified beta-hCG can pecific immunosary and for applications where hCG is active, e.g. specific immunosary and for applications where hCG is active, e.g. cappair acrown inhibition. The modified beta-hCG can produce neutralising antibodies to beta-hCG, which do not cross-react with coher neutral hormones.

M.B. Sequence not given in the specification, but constructed using the wild type beta-hCG sequence given in nature 307 959460, 37-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Modified beta-human chorlonic gonadotrophin proteins - useful as contragestative vaccine
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97.4%; Score 157; DB 18; Length 145;
Best Local Similarity 98.6%; Pred. No. 2.70-61;
Matches 138; Conservative 0; Mismatches 2; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccibne; human chorionic gonadotropin;
luceinising hormone; LH: CG.
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                                                                                                                                                                                                             Claim 5; Page -; 23pp; English.
       Delves PJ, Lund T, Roitt IM;
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                                                                 WPI; 1997-132639/12.
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AAR15117
AAR16
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                                                                                                                               The present sequence is the human chorionic gonadotrophin beta cabbuilt (beta-NGC), anino terminal loop mutnat Val275yr.

Combined to the preparation of a contragestative medicament: The modified beta-hCG has reduced cross-reactivity with luteinising hornone (LH), as defined by the ability of both luteinising hornone (LH), as defined by the ability of both be used as a contraceptive in females, in a vaccine. In a hGC can specific immunoassay and for applications where hGC is active, e.g. contracting antibodies to beta-hGC which do not cross-react with other natural hormones.

N.B. Sequence not given in the specification, but constructed using the wild type beta-hGG sequence given in nature 307 959460, 37-40 (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
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Modified beta-human chorionic gonadotrophin proteins - useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 97.4%; Score 757; DB 18; Length 145; Bost Local Similarity 98.6%; Pred. No. 2.7e-61; Matches 138; Conservative 0; Mismatches 2; Indels (
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68
/note= "wild type Arg replaced with Glu"
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                                                                                     Example; Page -; 23pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 145 AA;
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Misc-difference
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Synthetic.
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The subtitution introduces an additional cleavage site for CMBr, useful for determining the disulphide bonds. This can be used to show that murisquesis has not altered the 'normal' disulphide pattern of analoques, and for examining protein folding.
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AMAZ7688

Charloss grandard; protein; 145 AA.

AMAZ7688;

T12-JAN-1998 (first entry)

E Chorionic gonadotrophin beta subunit co

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KW hama: chorionic gonadotrophin; chorior

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                                                                                                                                                                        The sequence is an analogue of mature hCG beta subunit having residues 77, 82, and 83 replaced by the corresponding residues in the human LH protein. The chimaric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female and imale. See AMRISO43, AMRISO61-RIS125 and AMRISO61-RIS198.
New glyco-protein hormone analogues - for inducing fertility :
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Owery Match 97.3%; Score 756; DB 12; Length 145; Bet Local Similarity 97.9%; Pred. No. 7.38-61; Metches 13; Conservative 2; Mismatches 1; Indels (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hCG histidine substitution mutant, G8.
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                                                                                                                     Table VI; Page 65; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                           Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key Misc-difference 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-NOV-1991.
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0; Gaps
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    subunit (beta-hCG), carboxy-terminal loop mutant val79His, which can be used in the preparation of a contragestation the medicament. The modified beta-hCG has reduced cross-reactivity with lutefanishing hormone (LB), as defined by the ability of both proteins to react with the same antibody. The modified beta-hCG can proteins to react with the same antibody. The modified beta-hCG can specific immunoassay and for applications where hCG is active, e.g. Raposi sarcoma inhibition. The modified beta-hCG can produce neutralising antibodies to beta-hCG, which do not cross-react with coher natural hormones.

W. B. Sequence not given in the specification, but constructed using the wild type beta-hCG sequence given in nature 307 959460, 37-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
| 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 10.20 | 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note- "wild-type Asn 13 has been replaced by Gln to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Single chain gonadotropin; human chorionic gonadotropin; hCG; alpha; beta; subunit; analogue; glycoprotein hormone; fertility; inhubit; stimulate; increase; lutropin; lutelnising hormone; LH; follicle stimulating hormone; FSH; vaccine; contraceptive; deglycosylated; glycosylation site; deletion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human CG beta-subunit (N13Q) lacking first glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97.2%; Score 755; DB 18; Length 145; 98.6%; Pred. No. 4.1e-61; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Misc-difference 70 Colembre a sirvory statemer 70 Notes "Arg corresponds to CCG codon" 166.17 Labels 110ker 174.181 174.181 Condocropin_alpha_subunit_(1.8) //abels Gondocropin_alpha_subunit_(1.8) //oces "first 8 residues of alpha subunit"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR86258 standard; Protein; 181 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 98.65
Matches 138; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Misc-difference 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W09522340-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24 - AUG - 1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sedneuce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR86258;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 DVRFESIRLPGCPSGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLICDDPRFQASSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
proteins to react with the same antibody. The modified beta-hGG can be used as a contraceptive in females, in a vaccine, in a hGG specific immunoassay and for applications where hGG is active, e.g. Raposi sarcoma inhibition. The modified beta-hGG can produce neutralising antibodes to beta-hGG, which do not cross-react with other natural hormones.

N.B. Sequence not given in the specification, but constructed using the wild type beta-hGG sequence given in nature 307 959460, 37-40 (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; chorlonic gonadotrophin; chorlonic gonadotropin; beta-hCG; beta subunit; amino-terminal loop; mutant; reduction; LH; vaccine; contragestative medicament; cross-reactivity; luteinising hormone; contraceptive; immunoassay; kaposi sarcoma; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chorionic gonadotrophin beta subunit carboxy-terminal loop mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is the human chorionic gonadotrophin beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 97.3%; Score 756; DB 18; Length 145; Best Local Similarity 96.6%; Pred. No. 3.3e-61; Adviches 138; Conservative 0; Mismatches 2; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "wild type Val replaced with His"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified beta-human chorionic gonadotrophin proteins contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key Location/Qualifiers
Misc-difference 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW27687 standard; protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example; Page -; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Delves PJ, Lund T, Roitt IM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96WO-GB01717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-JUL-1995; 95GB-0014816.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-JAN-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neutralising antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-132639/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DELV/) DELVES P J. (ROIT/) ROITT I M.
                                                                                                                                                                                                                                                                                                                                                                             Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9704098-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW27687;
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Campbell RK, Moyle WR;

17-FEB-1995; 95WO-US02067

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The sequence is an analogue of mature hCG beta subunit having residues 55, 56, and 58 replaced by the corresponding stations in the hFSH protein. It was propd: by site directed mutagenesis of a CDNA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and famels and may halfsofi-reliate animals (see AAR15041, AAR15061-R15125 and
                                           New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                         97.0%; Score 754; DB 12; Length 145; 97.9%; Pred. No. 5e-61; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chrionic gonadotropin;
luckinising hormone; LH: GG; equine; horse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR15110 standard; Protein; 145 AA.
                                                                                                                                   Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 97.9%
Matches 137; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1991-353528/48.
  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hCG/eLH chimera, E2.
                                                                                                                                                                                                                                                                                                                                                                                                Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
Equus caballus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W09116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR15110;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 69
AAR15110
ID AAR15
                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                       Single chain gonadotropins having a chorionic gonadotropin (CG) beta-subunit at the Nereminus and a CG alpha-subunit at the C-terminus (or vice versa), joined by a linker of 1-16 amino acids are cialmed. Ten specific analogues were synthesised, acenhor (which was expected to contain 4 Aan-linked oligosaccharides. Removal of the glycosylation sites, particularly from the alpha-subunit, has been shown to reduce hormone efficacy and inhibit signal transduction. The present sequence 1s that of the hCG beta-subunit from which none of the two native glycosylation sites has been removed using strand overlap PCR.
                                                                                                                                                                                                Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating glyco:protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match
Ouery Match
Best Local Similarity 98.64; Pred. No. 5.18-61;
Best Local Similarity 98.64; Pred. No. 5.18-61;
Matches 198; Conservative 0; Mismatches 2; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gycoprotein hormone; fertility; immuno-castration;
immuno-confragestive; vaccine; human chorionic gonadotropin;
lolicie stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                    Example 23; Fig 17; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR15065 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141 SKAPPPSLPSPSRLPGPSDT 160
94US-0199382.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hCG/hFSH chimera, B5.
                                                                                                                          WPI; 1995-302553/39.
N-PSDB; AAT03240.
                                           (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 AA;
18-FEB-1994;
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                                                                                       Moyle WR;
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subunit (beta-hCG), carboxy-terminal loop mutant Gly75H1s, which can be used in the preparation of a contragastative medicament. The modified beta-hCG has reduced cross-reactivity with treinising bermone (HH), as defined by the ability of both proteins to react with the same antibody. The modified beta-hCG can be used as a contraceptive in females, in a vaccine, in a hCC cs pecific immunoassay and for applications where hCG is active, e.g. Kaposi sarcoma inhibition. The modified beta-hCG can produce cc neutral hormones.

CC NH. Sequence not given in the specification, but constructed using the wild type beta-hCG sequence given in nature 307 959460, 37-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; chorionic gonadotrophin; chorionic gonadotropin; beta-hCG; beta subunit; amino-terninal loop; mutant; reductioni LH; vaccine; contragestative medicament; cross; reactivity; intelnising hormone; contraceptive; fimanioassay; kaposi sarcoma; inhibition; enertalising antibody.
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                                                                                                                                                                                                                                                                                                                                                                                        Query Match 97.01; Score 754; DB 18; Length 145; Best Local Similarity 98:64; Pred: NO. 56-61; Marches 188; Conservative 0; Mismatches 2; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note- "wild type Pro replaced with His"
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Misc-difference 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 71
AAW27681
ID AAW27681 standard; protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-132639/12.
                                                                                                                                                                                                                                                                                                                                               145 AA;
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Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-JUL-1996;
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                                                                          The sequence is an analogue of mature hCG beta subunit having residues 94.96 replaced by the corresponding residues in the equine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agonist and/or antagonist. See ARRISO61.RISI25 and ARRISO61.RISI99.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 DVRFESIRLPGCPRGVNPVSYAVALSCQCALCQIKTTDCGGPRDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chorionic gonadotrophin beta subunit carboxy-terminal loop mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; chorionic gonadotrophin; chorionic gonadotropin; beta-hCG; beta subunit; amino terminal loop; mutan; reduction: Lii vaccine; contrageptative medicament; cross-reactivity; luceinising hormone; contraceptive; muminossay; Kaposi sarcoma; inhibition; mentralising antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Modified beta-human chorionic gonadotrophin proteins - useful as contragestative vaccine
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                                                                                                                                                                                                                                                                                              Ouery Match 97.0%; Score 754; DB 12; Length 145; Best Local Similarity 97.9%; Pred. No. 95-61; Matches 171; Conservative 1; Misantches 2; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note- "wild type Gly replaced with His"
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Misc-difference 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW27686 standard; protein; 145 AA.
                                  Table V; Page 64; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example; Page -; 23pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 SKAPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1997-132639/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (DELV/) DELVES P J. (ROIT/) ROITI I M.
                                                                                                                                                                                                                                                  Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-JUL-1996;
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Synthetic.
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The invention relates to the production of analogues of a heterodimeric subunit giycoprotein hormone (GPB), when obtoined gonadetropin (CC (hCG), human lutefalsing hormone (HEM), human follicle stimulating bormone (HEM), human follicle stimulating hormone (HEM), human follicle stimulating hormone (HEM), human interial propertion of the content an intersubunit disupplied bond, between an alpha-subunit cysteine and a beta-subunit cysteine, which are modified to contain an intersubunit disupplied bond, between an alpha-subunit cysteine and a beta-subunit cysteine, for content and intersubunit disupplied bond, contrained a material for the content of the subunit used for the generation of the content of the subunit used for the generation of the content of the hormone, thereby creating greater likelihood that the diamer will be formed in vivo and the formed dimer will have affinity for the native receptors and have a storical activity on them. The changes stabilise the GPHs and prolong the storic heartive GPHs and prolong as for the native GPHs.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
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96.8; Score 752; DB 20; Length 165;
Best Local Similarity 98.6%; Pred: No. 9.74-61;
Matches 138; Conservative 0; Mismatches 2; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccine; human chorionic gonadotropin;
lutebilising hormone; LH; GG; equine; horse.
                             Disclosure; Fig 31B; 139pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hCG/eLH chimera, E4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
Equus caballus.
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                                                                 The present sequence is the human chorionic gonadotrophin beta cashunic commission mutant Proteities.

Which can be used in the preparation of a contragestative medicament. The modified beta-hich has reduced cross reactivity with luteinising hormone (LH), as defined by the ability of both proteinising hormone (LH), as defined by the ability of both be used as a contraceptive in females, in a vaccine, in a hormone perfect immunoassay and for applications where hof can produce to perfect immunoassay and for applications where hoff is active, e.g. Kaposi sarcoma inthibition. The modified beta-hof can produce to meuralising antibodies to beta-hoff, which do not cross-react with other moural hormones.

N. B. Sequence not given in the specification, but constructed using the wild type beta-hoff sequence given in nature 307 959460, 37-40 (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRFQASSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH of fifth, have an intersubult distulbhide crosslink between the of hthat and beta-subunits to improve stability
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Query Match
Best Local Similarity 98.64; Pred. No. 6.2e-61.
Matches 138; Conservative 0; Mismarches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hCG-beta analogue hCG-beta'-Y37C, D99C.
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                         Example; Page -; 23pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 145 AA;
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Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW99541;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 72
AAW99541
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Gaps
                                                                                                                                                                              Ouery Match 96.4%; Score 749; DB 12; Length 145; Best Local Similarity 97.1%; Pred. no. 1.4e-66; Indels 0; Gaps Matches 136; Conservative 1; Mismatches 3; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKBGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The sequence is an analogue of mature hCG beta subunit having residues 89, 91, 92 and 99 replaced by the corresponding residues in the human LM protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals.

See ARRISO44, ARRISO61-RISI25 and ARRISI61-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive wacchies.
                                                                                                 96.4%; Score 749; DB 12; Length 145;
Ilarity 97.1%; Pred. No. 1.4e-60;
Conservative 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising'hormone; LH; CG.
and female animals. (See AAR15043, AAR15061-R15125 and AAR15161-R15198).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR15118 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                             121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                          122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hCG/hLH chimera, A3b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1991-353528/48.
                                                                                                 Query Match
Best Local Similarity
Matches 136; Conserv
                                                          Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR15118;
                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 75
AAR15118
88×8
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                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 96.5%; Score 750; DB 12; Length 145; Best Local Similarity 97.9%; Pred. No. 1.2e-06. Watches 137; Conservative 1; Mismatches 2; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                     2 SKEPLAPRRAP INATLAVEREGCPYCITYNTICAGYCPHTRYLAGYLPALPOYVCHYR 61
1 SKEPLAPRRED HATLAVEREGCPYCITYNTICAGYCPHTRYLAGYLPALDOYYCHYR 61
1 SKEPLAPRRED HATLAVEREGCPYCITYNTICAGYCPHTRYLAGYLPALDOYYCHYR 61
                                                    The sequence is an analogue of mature hCG beta subunit having residues 112-115 replaced by the corresponding residues in the equine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agonist see AAR15043, AAR15061-R15125 and AAR15161-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequence is an analogue of mature hCG beta subunit having residues 94-97 replaced by the corresponding residues in the hESH protein. It was prepd. by site directed mutagenesis of a cown sequence encoding the hCG beta subunit. The chimeric character is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New qlyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Table II; Page 61; 94pp; English.
               Table V; Page 64; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR15069 standard; Protein; 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hcg/hFSH chimera, B9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1991-353528/48.
                                                                                                                                                                                                                      Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo saplens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W09116922-A.
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0; Gaps

Fri Oct 11 17:40:40 2002

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This sequence represents a fusion protein of the human chorionic congradorrophin (HCG) beta subunit and Jun. The invention relates to a certain of comming a cysteine knot protein (I) having alpha and certain comprising attaching a dimerisation domain (DD) to either the reasonius comprising attaching a dimerisation domain (DD) to either the N-termini of both subunits or the N-terminus of the alpha-subunit and certain of the alpha-subunit and certain of the alpha-subunit and certain of the network of the alpha-subunit and certain of the alpha-subunit and certain and certain and certain of the alpha-subunit and certain of the alpha-subunit and certain of the alpha-subunit and certain of the polycystic ovariand disease (AII). The method is used to produce the recein DD in a see also useful of the polycystic ovariand disease (associated with excessive levels of certain signification of antiques (since a DD may containing highly antiques and callows the formation of heterodimers, that have similar structures can allows the combined on the enditied without loss of activity, and attachment of the DD celuces of a glycoprocial portion of polycystic or at all. The N-terminal part of a glycoprocial portion and conditied without loss of activity, and attachment of the DD reduces the complement of DD reduces of activity, and attachment of the DD reduces of activity, and attachment of DD reduces of activity of DD reduces of ac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; autigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                    Best Local Similarity 100.0%; Pred. No. 2e-60;
Matches 136; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human CG beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANY 43214

ANY 43214

ANY 43214

ANY 43214

ANY 43214;

ANY 43214;

ANY 43214;

Dr. 19-JAN-2000 (first entry)

XX

Human CC beta subunit-Jun fusion prote a gradual deglycosylated glycoprotein hormone; in polycystic ovarian diseas; hcG; human kW hospsjan65-Al.

XX

Homo saplens.

Synthetic.

XX

Homo saplens.

Synthetic.

XX

Homo saplens.

ANY 1999; 99WO-USOBOIB.

XX

HOSPS 3065-Al.

XX

HOSPS 4061-059625.

XX

HOTHER 1999; 99WO-USOBOIB.

XX

HOTH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                             1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPIMTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human CG beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY43270 standard; Protein; 204 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Fig 6; 73pp; English.
                                                                                                                                                                                                                                        13-APR-1999; 99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0059625.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-620431/53.
N-PSDB; AAZ31742.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-APR-1998;
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Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9953065-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY43270;
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MAK43377 76

MAK4377 76

MAK4377 76

MAK4377 19

MAK4377 19

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MAK4377 19

MAK437 19

MAK44 19

MAK437 19

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MAK44 19

Query Match

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Gaps
                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence is the human chorionic gonadotrophin beta subunit (beta-hCG), amino-terminal loop mutant ProtAlls, val25Tyr, which can be used in the preparation of a contragestative medicament. The modified beta-hCG has reduced cross-reactivity with luteinismen The modified beta-hCG has reduced cross-reactivity with proteins to react with the same antibody. The modified beta-hCG can be used as contraceptive in females, in a vaccine, in a hose used specific immunoassay and for applications where hCG is active, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; chorionic gonadotrophin; chorionic gonadotropin; beta-hCG; beta subunit; amino-terminal loop; mutant; reduction; LH; vaccine; contragestative medicament; cross-reactivity; luteinising hormone; neutralising antibody.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chorionic gonadotrophin beta subunit amino-terminal loop mutant.
                                                                                                                          ô
                                                           Ouery Match

96.34; Score 748; DB 18; Length 145;
Best Local Similarity 97.39; Pred. No. 1.88-60;
Matches 137; Conservative 0; Mismatches 3; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference 700te- "wild type Pro replaced with His" Misc-difference 700te- "wild type Val replaced with Tyr"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key Location/Qualifiers
Misc-difference 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          679
AAW27679 standard; protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Delves PJ, Lund T, Roitt IM;
                                                                                                                                                                                                                                                                                                                                                                                                                       122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 SKAPPPSLPSPSRLPGPSDT 140
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       145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JUL-1995;
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Synthetic.
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           Sequence
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110 AAN27679
110 AAN27679
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1111-JAA
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C argulant (beta-hCG), carboxy-terminal loop mitant of 19/1Mrg.

C argulant (beta-hCG), carboxy-terminal loop mitant of 19/1Mrg.

C argulant (beta-hCG), as defined by the ability of both lutelainsing hormone (iH), as defined by the ability of both both lutelainsing hormone (iH), as defined by the ability of both both loop proteins to react with the same antibody, the modified beta-hCG can specific immunoassay and for applications where hCG is active, e.g. Kaposi sarcoma inhibition. The modified beta-hCG can produce constraints and hormones.

C Raposi sarcoma inhibition. The modified beta-hCG can produce chear natural hormones.

C NB sequence not given in the specification, but constructed using the wild type beta-hCG sequence given in nature 307 959460, 37-40 (1984).
                                                                                                                  maman: chorionic gonadorrophin; chorionic gonadorropin; beta-NGG; beta subunit; amino-terminal loop; mutant; reduction; LH; vaccine; contragastative medicament; cross-reactivity; lutefinishing hormone contraceptive; mamnoassay; kaposi sarcoma; inhibition; enettalishing antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chorionic gonadotrophin beta subunit carboxy-terminal loop mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified beta-human chorionic gonadotrophin proteins - useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "wild type Gly replaced with Arg" Misc-difference 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note- "wild type Arg replaced with Ser"
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Misc-difference 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW27685 standard; protein; 145 AA.
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                                                                                                                                                                                                                                     Delves PJ, Lund T, Roitt IM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96WO-GB01717.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DELV/) DELVES P J. (ROIT/) ROITT I M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
Synthetic.
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Gaps

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and allows the combination of subunits that would otherwise combine poorly, or not at all. The Wrettrainal part of a glycoprotein hormone may be modified without loss of activity, and attachment of the DD reduces formation of homodimers: Reterodimers have longer circulation times in vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     68 LRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRF 127
                                                                                                                                                                                                                                                                                                                                                                                                   6 LRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRF 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The sequence is an analogue of mature hCG beta subunit having residues 2, 8, 10, and 15 replaced by the corresponding residues in the human LH protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals. See Analod3, ANISOG3, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New glyco-protein hormone analogues - for inducing fertility of immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                               Length 208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glycoprotein hormone; immuno-castration;
immuno-contragestives vaccine; human chorionic gonadotropin;
luceinising hormone; LH; CG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96.3%; Score 748; DB 12; Length 145; 97.1%; Pred, No. 1.8e-60; tive 1; Mismatches 3; Indels (
                                                                                                                                                                                                                                                                   Ouery Match 96.4%; Score 749; DB 20; Length 208 Best Local Similarity 100.0%; Pred. No. 2.1e-60; Hatches 136; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR15114 standard; Protein; 145 AA.
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Best Local Similarity 97.11
Matches 136; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hcG/hLH chimera, Al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1991-333528/48.
                                                                                                                                                                                                      208 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-MAY-1990;
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                                                                                                                                                                                                      Sequence
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The polycytic ovariand disease (associated with excessive levels of luterialsing promone). Products that retain DD a zer also useful as a manuogens or antigens (aince a DD may containing highly antigenic anno acid sequences). Attachment of a DD (which may be removed later).

The condition of the production of the production of acid sequences are contained and immunogenic properties) to native dimers,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorlonic gonadotrophin; alpha subunit; herapy; Pos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot protitins -
                                                                                                                                                                                                                                                          66 ESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                               Match 96.4%; Score 749; DB 20; Length 204; Local Similarity 100.0%; Pred. No. 26-60; Length ses 1158; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human CG alpha subunit-Fos fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY43306 standard; Protein; 208 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Fig 10; 73pp; English.
vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US08018.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          126 PPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      184 PPSLPSPSRLPGPSDT 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYNE-) UNIV NEW JERSEY.
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                                                         Sequence 204 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-APR-1999;
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                                                                                                                           Query Match
Best Local S
Matches 136
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Gaps

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61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPXDHPLTCDDPRFQDSSS 120
                                                                                                                                                62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSS 121
         Gaps
                                              0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence is an analogue of mature hCG beta subunit having residues 86, 87, 89, 91 and 92 replaced by the corresponding residues 86, 87, 89, 91 and 92 replaced by the corresponding receives in the hFSH protein. It was prepd. by site directed mutagenesis of a CDNA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See ANRISO41, ANRISO61-RISI25 and ANRISI61-RISI25)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues - for inducing fertility a immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5; Indels
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96.4%; Pred. No. 2.7e-60;
tive 0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                   AAR15068 standard; Protein; 145 AA
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                                                                                                                                                                                                                                                                  121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                      122 SKAPPPSLPSPSRLPGPSDT 141
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Best Local Similarity 96.4%
Matches 135; Conservative
         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hCG/hFSH chimera, B8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-MAY-1990;
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         Matches 136;
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                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLARRCRPINATLAVEKBGCPVCITVNTTICAGYCPTHTRVLGGVLPALPQVVCNYR 61
1 SKEPLARRCRPINATLAVEKBGCHVCITVNTTICAGYCPTHTRVLGGVLPALQQVVCNYR 60
1 SKEPLARRCRPINATLAVERGCHYCTTVNTTICAGYCPTHTRVLGGVLPALQQVVCNYR 60
                                                                                                                                                                                                                 96.3%; Score 748; DB 18; Length 145;
97.9%; Pred. No. 1.8e-60;
Live 0; Mismatches 3; Indels 0; Gaps
Kaposi sarcoma inhibition. The modified beta-hCG can produce neutralising antibodies to beta-hCG, which do not cross-react with orber natural hormones.

N.B. Sequence not given in the specification but constructed using the wild type beta-hCG sequence given in nature 307 959466, 37-40 (1984).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glycoprotein hormone, immuno-castration;
immuno-contragestive, vaccine, human chorionic gonadotropin;
luteinistag hormone, LH; CG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 747; DB 12; Length 145;
Pred. No. 2.2e-60;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR15115 standard; Protein; 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 97.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91WO-US03162.
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                                                                                                                                                                                                              Query Match 96.39
Best Local Similarity 97.91
Matches 137; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hCG/hLH chimera, A2.
                                                                                                                                                                      Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W09116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 82
AAR15115
ID AAR15
XX
      8888888
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Human chorionic gonadotropin; HCG; beta subunit; abortive; antifertility; cytostatic; vaccine; contraception; hormone related disease; hormone-associated carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96.04; Score 746; DB 12; Length 145;
97.94; Pred. No. 2.7e-60;
tive 0; Mismatches 3; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sequence is an analogue of mature hCG beta subunit having residue life replaced by a Cys residue. This introduces an additional cleaves This for CNBr, useful for determining the disulphile bonds. This can be used to show that mutagenesis has not altered the "normal" disulphile pattern of analogues, and for see Ammining protein folding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                           Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human chorionic gonadotropin beta subunit structure I.
                                                                                                         hCG histidine substitution mutant, G8.
  AAR15176 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB48385 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                               90US-0520703.
                                                                                                                                                                                                                                                                               91WO-US03162.
                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 97.97
Matches 137; Conservative
                                                                                                                                                                                                                                                                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 145 AA;
                                                                                                                                                                                                                                                                             07-MAY-1991;
                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                             14-NOV-1991.
                                                                                                                                                                                                                                                                                                               08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                  Campbell RK,
                                                                  11-FEB-1992
                                                                                                                                                                                                           WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-FEB-2001
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61 DVRFESIRLPGCPRGVNPVVSYAVATQCHCGKCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The sequence is an analogue of mature hCG beta subunit having residues 74, 77, 79, 82 and 83 replaced by the corresponding residues in the bowine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human recoptor and may also have applications as an immunogen, see AMRISO43, AARISO61-RIS125 and AARISO61-RIS198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 96.0; Scord 746; DB 12; Length 145; Best Local Similarity 96.4%; Pred. No. 2.74-60; Matches 135; Conservative 3; Mismatches 2; Indels Matches 135; Conservative 3; Mismatches 2
                                                                                                                                                                                                                                                                                           Glycoprotein hormone; immuno-castration;
immuno-contragestive; veccine; human chorionic gonadotropin;
luteinising hormone; LH; CG; bovine.
                                                                                                                                                    AAR15101 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Table IV; Page 63; 94pp; English.
                               122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90US-0520703.
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                                                                                                                                                                                                                      11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1991-353528/48.
                                                                                                                                                                                                                                                           hCG/blH chimera, D5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Campbell RK,
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                                                                                                                                                                                      AAR15101;
                                                                                                                  RESULT 84
AAR15101
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AAR15176
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1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLGGVLPALPQVVCTYH 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                       The sequence is an analogue of mature hGG beta subunit having residues 36, 60-62, 65 and 67 replaced by the corresponding residues in the bovine Life protein. The chimeric hormone may be useful for identifying residues withich are important for binding to the human receptor and may also have applications as an immunogen, see ANRIGAT ANRIGOT-RISIZE and ANRISIGI-RISIZE.
                                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 95.94; Score 745; DB 12; Length 145; Best Local Similarity 95.74; Pred. No. 3.3-6-6) Matches 134; Conservative 3; Mismatches 3; Indels Matches 134; Conservative 3; Mismatches 3; Indels 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccine; human chorionic gonadotropin;
lutekinising hormone; LH: GG; bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15098 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                 Table IV; Page 63; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                           91WO-US03162.
                                                                                                  90US-0520703.
                                                                                                                           (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                    Campbell RK, Moyle WR;
                                                                                                                                                                        WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hCG/bLH chimera, D2.
                                                                                                                                                                                                                                                                                                                                                                         Sequence 145 AA;
                                                                         07-MAY-1991;
                                                                                                  08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-MAY-1991;
                                                  14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAY-1990;
                         WO9116922-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-NOV-1991.
   Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15098;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 88
AAR15098
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                                                                                                                                                                                                                                                                                                                                                                    The present sequence is a fragment of the beta subunit of human chorionic gonddotropin (EGG). It is given in a specification relating to a vaccine composition capable of eliciting antibody formation against HoG. The vaccine comprises an HCG polypeptide coupled to diphiberia toxoid or tetanus toxoid and a vehicle comprising a mixture of mannide monocleate with squalane or squalene. The vaccine is useful for contraception, abortion or treatment of hormone related disease states and disorders and the treatment of hormone-associated carcinomas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 96.0%; Score 746; DB 22; Length 145;
Best Local Similarity 97.3%; Pred. No. 2.70-60;
Matches 137; Conservative 0; Mismatches 3; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antigenically modified polypeptide composition used as a vaccine against human chorlonic gonadotropin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glycoprotein hormone: Immuno-castration;
Immuno-confragestrie; vacchier, human chorionic gonadotropin;
Internising hormone; LH: GG: bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 32; Column 18; 55pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                             7805-0936876.
8705-0073748.
9205-0935331.
8905-0311331.
7305-0357892.
7405-0462955.
                                                                       95US-0471422
                                                                                                                                                                                                 81US-0112628
81US-0323690
                                                                                                                                                                                                                                    (OHIS ) UNIV OHIO STATE.
                                                                                                                                                                                                                                                                                    WPI; 2001-023400/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 145 AA;
                                                                                             25-AUG-1978;
15-JUL-1987;
26-AUG-1992;
17-FEB-1992;
07-MAY-1973;
16-OCT-1973;
14-OCT-1975;
14-OCT-1975;
16-JUL-1981;
20-NOV-1981;
                                                                                                                                                                                                                                                           Stevens VC; .
                                                                      06-JUN-1995;
                       US6143305-A.
                                              07-NOV-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 87
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19-JUL-1995; 95GB-0014816.

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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                  The present sequence is the human chorionic gonadotrophin beta subunit (beta-hCG), amino-terminal loop mutant Lya20Ana, GiuJJArg, Gily22Clu, which can be used in the preparation of a contragestative medicament. The modified beta-hCG has reduced cross-reactivity with luterinising hormone (tall, as defined by the ability of both proteins to react with the same antibody. The modified beta-hCG can be used as a contraceptive in females, in a vaccine, in a hCG specific immunosasy and for applications where hCG is active, e.g. Raposi sarcoma inhibition. The modified beta-hCG can produce noternalising antibodies to beta-hCG, which do not cross-react with other natural hormones.

N. B. Sequence not given in the specification, but constructed using the wild type beta-hCG sequence given in nature 307 95960, 37-40
                                                                                                                                                          Modified beta-human chorionic gonadotrophin proteins · useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95.8%; Score 744; DB 18; Length 145; 97.1%; Pred. No. 4e-60; Live 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising hormone; LH; GG; bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR15102 standard; Protein; 145 AA.
                                                                                                                                                                                                                   Example; Page -; 23pp; English.
                                                                             Delves PJ, Lund T, Roitt IM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 97.11
Matches 136; Conservative
                                                                                                                    WPI; 1997-132639/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hCG/bLH chimera, D6.
                       (DELV/) DELVES P J. (ROIT/) ROITT I M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-MAY-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 DVRFESIRLPGCPRGVRPVVSYAVALSCQCALCRRSTTDCGGPKDPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                The sequence is an analogue of mature hGG beta subunit having residues 18 122, 29, 310 and 12 replaced by the Corresponding residues In the bovine Life protein. The chimatic hormone may be useful for identifying residues withch are important for binding to the human receptor and may also have applications as an immunogen, see AARISGG1-RISI23 and AARISGG1-RISI298.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    manan: chorionic gonadotrophin; chorionic gonadotropin; beta-hCG; beta subunit; andio-terminal loop; mutant: reduction: LH; waccine; contragestative medicament; cross-reactivity; lucelinising hormone; contraceptive; mmunossay; kaposi sarcoma; inhibition; meticalising intibod;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chorionic gonadotrophin beta subunit amino-terminal loop mutant.
                                                                                                                 New glyco-protein hormone analogues - for inducing fertility a immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 95.9%; Score 745; DB 12; Length 145; Best Local SIMIlarity 96.4%; Pred. No. 3.3e-06. Metches 15; Conservative 1; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note- "wild type Glu replaced with Arg"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Misc-difference 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "wild type Gly replaced with Glu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Key Location/Qualifiers
Misc-difference 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW27678 standard; protein; 145 AA.
                                                                                                                                                                                            Table IV; Page 63; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122 SKAPPPSLPSPSRLPGPSDT 141
(UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96WO-GB01717.
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                                      Campbell RK, Moyle WR;
                                                                          WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                           Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-JUL-1996;
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0; Gaps

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The sequence is that of a modified form of human chorionic gonadotrophin (hCG), analogue "D', in which amino acids in the "O's addyor "G' regions have been subtituted resulting in changes in the binding specificity and avidity of luteinising hormone (LH) and follicle stimulating hormone (ER) receptor. It is was used to the prepin of an alpha, beta-heterodimentic polypeptide having an affinity to vertebrate LH and FRH:LH acceptors. Such an analogue can be prepared having a desired ratio of FRH:LH activity. The polypeptide may be used for treating human infertility or polycystic ovarian disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 SKEPLRPRCRPINATLAVEKEGCPVCITVNITICAGYCPTMTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                     New alpha, beta-hetero:dimeric polypeptide derivs. - which bind to tructinising and follicle stimulating homeone receptors, useful for controlling the ratio of FSH to LH activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HCG; human; chorionic gonadotropin; beta-subunit; hetarodimer; alpha-subunit; ld receptor; FSP receptor; HJ, FSP; hyrotropin prepaid on, oregion; protein enginearing; fertility; hormone; folicle stimulating hormone; luteinising hormone; TSH; ovulation; spermatogenesis.
                                                                                                                                                                                                                                                                                                                                                                                 Onery Match 95.6; Score 743; DB 14; Length 145; Best Local Similarity 96.44, Pred: No. 5e-60; Marches 135; Conservative 1; Mismatches 4; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Human FSH D-region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "HCG sequence"
94.97
/note= "Human FSH D-reg
98.145
/note= "HCG sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                         Disclosure; Page 21; 98pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR88923 standard; protein; 145 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HCG analogue-D beta-subunit.
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    Campbell RK, Moyle WR;
                                     WPI; 1993-018070/02.
                                                                                                                                                                                                                                                                                                                                                   Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-JAN-1994;
18-JUN-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hOG; glycoprotein hormone analogue; human infertility; LH; FSH;
Luteinising hormone receptor; follicle stimulating hormone receptor;
vertebrate; polycystic ovarian disease.
                                                                                                                                                                                                     The sequence is an analogue of mature hCG beta subunit having residues 89; 91, 93, 785 and 97 replaced by the corresponding residues 10; 10; 10 and 97 replaced by the corresponding residues 11 for Leftifying residues which art important for binding to the human receptor and may also have applications as an immunogen, agonist and/or antegonist.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94.../
70t.../
100...106
/note= "G region - ESH binding and specificity"
                                                                                                    New glyco-protein hormone analogues - for inducing fertility immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                               Query Match 95.6%; Score 743; DB 12; Length 145; Best Local Similarity 96.4%; Pred. No. 96-60; Matches 15; Conservative 1; Mismatches 4; Indels Matches 15; Conservative 1; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
94..97
Anote- non-hCG derived residues*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified hCG beta-subunit - analogue "D".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR31006 standard; protein; 145 AA.
                                                                                                                                                                     Table IV; Page 63; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 SKAPPPSLPSPSRLPGPSDT 140
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(UYNE-) UNIV MED NEW JERSEY.
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                                  Campbell RK, Moyle WR;
                                                                   WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                              Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-JUN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-JUN-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR31006;
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Region
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AAR31006
ID AAR31
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us-09-813-398-3.default.rag

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The invention relates to human single chain forms of the glycoprotein chromograph which is an agonist or antegorist of luterinising hormone component of chromograph which is an agonist or antegorist of intendinish phormone (IM), follicle stimulating hormone (IM), follicle stimulating beta subunits. The agonist forms of single chain hormones are used in treating infertility, as aids in vitro fertilisation techniques, and other therapeutic methods in vitro fertilisation techniques, and other therapeutic methods in vitro fertilisation techniques, and other therapeutic methods of exception in an anner similar to heterodimers as alganostic tools to blooping samples, as control research in a simple chain promone at the presence of antibodies with respect to the native proteins in cleect the presence of antibodies in a vitrol research of receptors or receptors to which the native hormones bind: the single chain normones attained as purification to subsequent preparations of these materials and monitor clevels of subsequent preparations of these materials and continuous administered as a furga. The single chain supported the present sequence is human single chain gonadotropin analog consisting of human chottonic gonadotropin (CG) beta subunit (1-145 amino consisting of human single chain gonadotropin apparation acids) by a linker sequence. This analog serves as a useful starting compound for template directed vaccine design and for the development of
                                                                                                                                                                                                                                                                                          /note- Linker peptide / /note- Linker peptide / /note- Corresponds to 1-92 amino acids of human single chain genadotropin alpha-subunit*
                                                                    /note- "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
/note= "Wild type Asn substituted with Xaa, Where Xaa
refers to Gln or other amino acid*
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                                                                                                                                                        /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note- "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other inferipeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                70.01 wild type Val substituted with Thr 166.173 /note- "Linker peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 9; Column -; 87pp; English.
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94US-0289396.
94US-0310590.
94US-034628.
94US-0351591.
95US-0475049.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-366474/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Boime I, Moyle WR;
                                                                                              Misc-difference
                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US6238890-B1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                        The sequence is an example of a glycoprotein hormone beta-chain

C analogous used to construct an alpha, beta-heterodimer polypeptide

With altered binding affinity to LH receptor and FSH receptor. The

C heterodimer preferably contains an HGG alpha-subunit and a chimaeric

Deta-subunit containing HGG, LH, FSH and/or thyrotropin residues.

C Binding activity and specificity may be altered without disrupting

C heterodimer formerlion or reaction with antibodies. The D-region of

CHG is most important for LH receptor binding, and the G-region is

C mapt important for FSH binding. Analogue D, with an FSH D-region,

C minds to an in receptor with considerably lower potency than HGG,

C and does not bind to LH receptors. A cDAM for malogue-D may be

Expressed in a CGS-7 cell culture. This type of hormone analogue

C may be useful clinically for induction of evulation in women with

C polycystic ovary disease, or to increase spermatogenesis in

Exceptor and LH and LH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; single chain gonadotropin analog no:1b; anti-infertility; drug; peptide therapy; lutefaliaing hormone; Lif follicle stimulating hormone; FSH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein; mutean; muten.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPIMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.SKEPLRPRCRPINATLAVEKEGCPVCITVNITICAGYCPTWTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                   New alpha, beta-hetero:dlmeric glyco:protein hormone polypeptide(s) - having a non-neturally occurring beta-subunit derived from hCG, Lel, PSH and TSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
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                                                                                                                                                                              Moyle WR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human single chain gonadotropin analog no:1b.
                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Column 11-12; 27pp; English.
                                                                                                                                                                          Han Y, Macdonald GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAE04518 standard; Protein; 265 AA.
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95US-0425673.
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                                       18-AUG-1993;
18-APR-1995;
                                                                                                                                                                          Campbell RK,
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Synthetic.
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Human chorionic gonadotropin beta subunit; HGG-beta; epitope homopolymer; Hmunogenic; entibody production; immunocontraception; abortifacient; vaccine; fertility confrol.
                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a polypeptide linear homopolymer comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antigenically modified polypeptides useful for treating cancer, 
ypercension, diabetes and associated vascular diseases comprises 
immunogenic polypeptides conjugated to carrier moleties
                                          ö
       97.1%; Pred. No. 7.6e-60;
.1ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human chorlonic gonadotropin beta subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example VIII; Column 18; 56pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key Location/Qualifiers
Misc-difference 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY87479 standard; peptide; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         //abel- unknown
Misc-difference 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      label- unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /label- unknown
                                                                                                                                                                                                                                                                                                                                  122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                         121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              78US-0936876.
87US-0073748.
92US-0935331.
89US-0311331.
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7305-0406821.
7405-040585.
7505-0622031.
8005-0112628.
8105-0323690.
8305-050777.
8405-050777.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95US-0469043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-JUL-2000 (first entry)
           Best Local Similarity 97.1
Matches 136; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (OHIS ) UNIV OHIO STATE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Misc-difference 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-AUG-1978,
26-AUG-1987,
26-AUG-1987,
07-NRY-1973,
16-CCT-1973,
14-CCT-1973,
14-CCT-1974,
14-CCT-1974,
14-CCT-1976,
16-CCT-1976,
16-CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81 DVRFESIKLPGCPRGVNXTVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSS 140
hormone-specific vaccines for use in humans.

Note: The present sequence is not shown in the specification, but is derived from the human single chain gonadotropin analog no:1 shown as SEQ ID NO: 3, in figure 5 of the specification (AAEO4474).
                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                               62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDGGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                              The sequence is an analogue of mature hCG beta subunit having residues 39, 41, 42 and 41 steplaced by the corresponding residues 19, 41, 42 and 41 steplaced by the corresponding mutagenesis of a CDNA sequence encoding the hCG beta subunit. The Cimeric hormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15043, AAR15061-R15125 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New glyco-protein hormone analogues k. for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
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                                                                                                                                                                                                              Query Match
95.64; Score 743; DB 22; Length 265;
Bost Local Similarity 97.18; Pred. No. 9.2e-60;
Matches 136; Conservative 0; Mismatches 4; Indels
Matches 136; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycoprotein hormone; ferfility; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
follicie stimulating hormone; FSH; GG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 12, Length 145;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR15063 standard; Protein; 145 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141 SKAPPSLPSPSRLPGPSDT 160
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hCG/hFSH chimera, B3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1991-353528/48.
                                                                                                                                                       Sequence 265 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-MAY-1990;
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This sequence represents a fusion protein of the human chorionic conditions and advantaged and advantaged and advantaged and accordance to the comprising attaching a dimerisation domain (DD) to either content of both subunits or the N-termina of the alpha-subunit and the C-termina of both subunits or the N-termina of the alpha-subunit and to the C-termina of the beta-subunit and dimerisation dead in (DD) to either to the N-termina of the alpha-subunit and to the A-termina of the alpha-subunit and to the A-termina of the alpha-subunit and to the N-termina of the A-termina of the A-termina
                                              Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64 LRPRCRPINATLAVEKEGCPVAITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTRDVRF 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66 ESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 95.2%; Score 740; DB 20; Length 204; Best Local Smilarity 99.3%; Pred. No. 1.13-67; Matches 135; Conservative 0; Mismatches 15; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6 LRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRF 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fusion protein; thrombopoletin; TPO; human chorionic gonadotrophin; beta subunit; hCG-beta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TBP(20-161)/hCG-beta fusion protein.
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279..1202
/*tag= a
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                                                                                                                                              Example 3; Fig 13; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97WO-US02315.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               126 PPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     184 PPSLPSPSRLPGPSDT 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       204 AA;
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three or more peptide monomers which may be used as an famonocontraceptive and/or aboriticatent. The peptide andonomers are faminan chorionic peptides derived from the C-terminal portion of the human chorionic genedictopin beta subunit (HGC-beta) comprising either residues 105-145 cc of HCC beta (AAV87501) or residues 111-145 of HCC-beta (AAV876480). By the peptide monomers are non-immonogenic; bawever, the homopolymer is capable of inducing anti-HCC antibody production HCC plays a role in the maintenance of pregnancy, and has also been shown to induce ovulation and stimulate corpus intend function. Anti-HCC antibodies are aissed against the homopolymer of the invention are not cross reactive with lutenisish phonomo (HJ). The first 10 residues of HCC-beta are virtually identical to those of LH, and prior art anti-HCC antibodies are thought to cause early abortion by neutralising CG in the periance are thought to cause early abortion by neutralising CG in the periance and disrupted almost immediately after to the corpus impaint to cause early abortion parent and capable for control of female fertility. The present sequence represents the beta exemplification of the present length of the assumer exercents the beta exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGS, hyman; chorlonic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 95.41; Score 741; DB 21; Length 145; Best Local Similarity 97.11; Pred. No. 7.6e-60. Heaches 136; Conservative 1; Mismatches 3; Indels C Matches 136; Conservative 1; Mismatches 3; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human CG beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY43275 standard; Protein; 204
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N-PSDB; AAZ31751.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-APR-1998;
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Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY43275;
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AAY43275
ID AAY432
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AC AAY432
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Query Match 95.2%; Score 740; DB 18; Length 336; Best Local Similarity 100.0%; Pred. No. 2.2e-59; Maches 114; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                         A movel fusion protein comprises 2 dimer forming co-expressed anino acid sequences, each consisting of a homodiment or heterodiment creceptor child or ligand, with ligand-receptor binding activity, bound directly or via a peptide linker to a subunit of a heterodiment control hormone capable of forming a heterodimer with heterodiment protein hormone capable of forming a heterodimer with the hormone so ther subunits. The fusion protein, e.g. the thromospotein (FPO)/human chorionic genadotrophin-beta subunit (hoc-beta) fusion protein denoted by the present sequence, significantly increases the biological activity of the hormone component, reducing the requirement for hormone liself and the
                            Hybrid dimeric protein comprising two co-expressed units - each based on receptor or ligand and a subunit of a heterodimeric hormone, especially FSH, for inducing follicular maturation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH; GG; bovine.
                                                                                                                      Example; Pages 39-40; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR15097 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hCG/bLH chimera, D1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 336 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-MAY-1991;
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Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-MAY-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            68 IRLPGCPRGVNVVSYAVALSCQCALCRRSTIDCGGPKDHPLTCDDPRFQDSSSSKAPPP 127
229 IRLPGCPRAVNVVSYAVALSCQCALCRRSTIDCGGPKDHPLTCDDPRFQDSSSSKAPPP 389 IRLPGCPRAVNVVSYAVALSCQCALCRRSTIDCGGPKDHPLTCDDPRFQDSSSSKAPPP 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                               A movel fusion protein comprises 2 dimer forming co-expressed amino acid sequences, each consisting of a homodiment or heterodimeric receptor child or ligand, with ligand-receptor binding activity, bound directly or via a peptide linker to a subunit of a heterodimeric protein hormone capable of forming a heterodimer with the hormone 3 other subunits. The fusion protein, e.g. the thromone openion of protein, e.g. the thromone openion of protein denoted by the present sequence, significantly increases the biological activity of the hormone component, reducing the requirement for hormone treatled and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fusion protein; thrombopoletin; TPO: human chorionic gonadotrophin; beta subunit; hGG-beta.
                                                                                                                                                            Hybrid dimeric protein comprising two co-expressed units - each based on receptor or ligand and a subunit of a heterodimeric hormone, especially FSH, for inducing follicular maturation
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95.2%; Score 740; DB 18; Length 307; 100.0%; Pred. No. 2e-59; Live 0; Mismatches 0; Indels (
(ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
                                        Campbell RK, Chappel SC, Jameson BA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Campbell RK, Chappel SC, Jameson BA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TBP(20-190)/hCG-beta fusion protein.
                                                                                                                                                                                                                                                          Example; Pages 34-35; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 98
AAW33360
1D AAW33360 standard; Protein; 336 AA.
X AAW33360;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.0
Matches 134; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           128 SLPSPSRLPGPSDT 141
                                                                                          WPI; 1997-425036/39.
N-PSDB; AAT94008.
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N-PSDB; AAT94022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 307 AA;
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Ouery Match 95.0%; Score 738; DB 12; Length 145; BB BEST Local Similarity 95.0%; Pred. No. 1.4e-9; Indels 0; Gaps Matches 133; Conservative 3; Mismatches 4; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
thyroid stimulating hormone; TSH; CG;
                                                                                                                          Ouery Match 95.04; Score 738; DB 12; Length 145; Best Local Similarity 93.64; Pred. No. 1.46-95; Matches 131; Conservative 8; Wismatches 1; Indels 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15089 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hCG/hTSH chimera, C2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 145 AA;
                                                                 Sequence 145 AA;
    AAR15161-R15198)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-FEB-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 SRGPLRPLCQPINATLAAEKEACPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence is an analogue of mature hCG beta subunit having residues 59.64.66.7, and 69 replaced by the corresponding residues in the hFS protein. It was prept. by site directed mutagenesis of a coNk sequence encoding the hCC beta subunit. The chimeric hormone is capable of directing hormone binding to both Lift and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animais. (see ANR1504, ANR15061-R15125 and
                                                             the sequence is an analogue of mature hGG beta submit having residues 3.3.8 in 0.118, and 22 replaced by the corresponding residues In the bovine LH protein. The chimeric hormone may be useful for identifying residues within are important for binding to the human zeepoor and may also have applications as an immunogen.
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                                                                                                                                                                                                                                                                                                                                                                                               95.1%; Score 739; DB 12; Length 145; 95.7%; Pred. No. 1.1e-59; Live 2; Mismatches 4; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragasilve; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                  agonist and/or antagonist.
See AAR15043, AAR15061-R15125 and AAR15161-R15198.
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Table IV; Page 63; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                               Query Match 95.1%
Best Local Similarity 95.7%
Matches 134; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hcG/hFSH chimera, B6.
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                                                                                                                                                                                                                                                                                                                                       Sequence 145 AA;
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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVYCNTR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                        The sequence is an analogue of mature hCG beta subunit having residues 22, 24, 25, 28, 29, and 33 replaced by the corresponding residues in the hFSH protein. It was prepd. by site directed mutagenesis of a cDMA sequence encoding the hCG beta subunit. The Chimeric hormone is capable of directing hormone blanding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AARISO41-RIS125 and AARIS051-RIS125 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chorionic gonadotrophin beta subunit carboxy-terminal loop mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; chorionic gonadotrophin; chorionic gonadotropin; beta-hCG;
                                                                                                                                                                                                                                                                                                                                                               New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                            Glycoprotein Aormone; fertility; immuno-castration;
immuno-contragestive; vactine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Onery Match
94.74; Score 736; DB 12; Length 145;
Best Local Similarity 95.74; Pred. No. 2.1e-93;
Matches 14; Conservative 2; Mismatches 4; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW27683 standard; protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                 Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 SKAPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                        90US-0520703.
                                                                                                                                                                                                                                                                                   (OYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                             91WO-US03162.
                                          11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-JAN-1998 (first entry)
                                                                                                                                                                                                                                                                                                            Campbell RK, Moyle WR;
                                                                 hCG/hFSH chimera, B2.
                                                                                                                                                                                                                                                                                                                                      WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 145 AA;
                                                                                                                                                                                                                               07-MAY-1991;
                                                                                                                                                                                                                                                        08-MAY-1990;
                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                     14-NOV-1991.
                                                                                                                                                                            W09116922-A.
                 AAR15062;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW27683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 95.0%; Score 738; DB 12; Length 145; Best Local Similarity 94.3%; Pred. 40, 7.14e-79. Matches 112; Conservative 4; Mismatches 4; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequence is an analogue of mature hCG beta subunit having residues 62-69 replaced by the corresponding residues in the hTSH protein. The chimeric hormone may be useful as a TSH antagonist for the treatment of hyperthyroidism.

See ARRISO41, ARRISO61-R15125 and ARRIS161-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as immuno-castration agains, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                      Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
thyroid stimulating hormone; TSH; GG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 103
AAR15062
ID AAR15062 standard; Protein; 145 AA.
                                                                                                                                              AAR15091 standard; Protein; 145 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Table III; Page 62; 94pp; English.
                                                   122 SKAPPPSLPSPSRLPGPSDT 141
                                                                   121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                 90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                      91WO-US03162.
                                                                                                                                                                                                   11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Campbell RK, Moyle WR;
                                                                                                                                                                                                                             hCG/hTSH chimera, C4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                      07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-1990;
                                                                                                                                                                                                                                                                                                            Homo saplens
                                                                                                                                                                                                                                                                                                                                    W09116922-A.
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                                                                                                                                                                          AAR15091;
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0; Gaps

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The sequence is an analogue of mature hCG beta subunit having residues 77, 82, 83, 89, 91, 72 and 99 replaced by the corresponding residues in the human LH protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in mane and female animals.

See AARISO4. AARISO61-RISI25 and AARISIG1-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New glyco-protein hormone analogues - for inducing fertility & immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                 Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH: GG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 94.6%; Score 735; DB 12; Length 145; Best Local Similarity 95.0%; Pred. No. 2.6e-79; Metches 133; Conservative 3; Mismatches 4; Indels 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
       AAR15116
ID AAR15116 standard; Protein; 145 AA.
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15109 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                          07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                 90US-0520703.
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                                                                                                     11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hCG/eLH chimera, El.
                                                                                                                                            hCG/hLH chimera, A3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 145 AA;
                                                                                                                                                                                                                                                             Homo saptens.
                                                                                                                                                                                                                                                                                                                                                                                                                 08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Campbell RK,
                                                                                                                                                                                                                                                                                                 WO9116922-A.
                                                                                                                                                                                                                                                                                                                                      14-NOV-1991.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 106
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence is the human chorionic gonadotrophin beta cabbus, for abbus, represent a carboxy-terminal loop mutant Argégélu.

Argégélus, Gigy-Siles, Val79His, which can be used in the preparation of a contragestative medicament. The modified beta-hoch sar reduced cross-reactivity with luteinish promone (HH), as defined by the bablisty of both proteins to react with the same antibody. The modified beta-hoc can be used as a contraceptive in females, in a modified beta-hoc can produce mentralism and for applications where hoc is active, e.g. Kaposi sarroma inhibition. The modified hot hock can produce mentralism antibodies to beta-hoc surface with other natural homones.

M. B. Sequence not given in the specification, but constructed using the wild type beta-hoc sequence given in nature 307 959460, 37-40 (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
beta subunit; carboxy-terminal loop; mutant; reduction; vaccine; contragestative medicament; cross-reactivity; luteinising hormone; contraceptive; immunoassay; Kaposl sarcoma; inhibition; LH; neutralising antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified beta-human chorionic gonadotrophin proteins – useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 94.7%; Score 736; DB 18; Length 145; Best Local Similarity 96.4%; Pred No. 2.1e-59; Matches 135; Conservative 0; Mismatches 5; Indels (
                                                                                                                                                                                                                                   Misc-difference 79 foote "wild type Arg replaced with His" Misc-difference 75 foote "wild type Gly replaced with His" Misc-difference 79 foote "wild type Val replaced with His"
                                                                                                                                                                                 Alac-difference 74
                                                                                                                                            Location/Qualifiers
Misc-difference 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example; Page -; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Delves PJ, Lund T, Roitt IM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                    19-JUL-1996; 96WO-GB01717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95GB-0014816.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1997-132639/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DELV/) DELVES P J. (ROIT/) ROITI I M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-JUL-1995;
                                                                                                   Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                        WO9704098-A2.
                                                                                                                                                                                                                                                                                                                                                                                            06-FEB-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 105
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0; Gaps

luteinising hormone; LH; CG; equine; horse.

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"wild-type Pro at position 78 of the beta-
subunit can be replaced by another amino acid
to agree with the glycosylation site motif"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                               166..173
//label- linker
114..265
//label- Gonadotropin_alpha_subunit_(1-92)
225
//note= "wild-type Asn at position 52 of the alpha-
subunit is opt. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "wild-type Asn at position 78 of the alphasubunit is opt. replaced by another amino acid (esp. Gin) to remove a glycosylation site"
/label= hCG_beta_subunit_(1-145)
33
/note= "wild-type Asn at position 13 of the beta-
subunit is opt. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site*
                                                                                                                            "wild-type Asn at position 30 of the betasubunit is opt. replaced by another amino acid (esp. Gln) to remove a glycosylation alte"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The single-chain gonadotropin analogue 1b (human CG-beta(1-145) [N13x,N30x,P08x,V795]. Liker-human CG-alpha(1-92)[N5X,N18K]) is an example of a chimeric glycopeptide hormone having an extra glycosylation site. Addition of oligosaccharides has a positive effect on stability of hormones in circulation and can be used to prevent unwanted antibody or receptor interactions. The present analogue has anti-luteinising hormone (lutropin) activity and can be used for facilitating owulation, terminating pregnancy and reducing androgen secretion.
                                                                                                                                                                                                                                                                                                            99
/mote- "wild-type Val at position 79 of the beta-
subunit is replaced by Thr to agree with
the glycosylation site motif'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating glyco:protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match
94.5%; Score 714; DB 16; Length 265;
Best Local Similarity 96.4%; Pred. No. 66-59;
Matches 135; Conservative 0; Mismatches 5; Indels (
Matches 135; Conservative 0; Mismatches 5; Indels (
                                                                                                                                                                                                                        "Arg corresponds to CCG codon"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 25; Fig 6 and Page 60; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95WO-US02067.
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                                                                                                              50
/note- '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                251
/note- '
                                                                                                                                                                                                     Misc-difference 70 /note- '
                                                                                                                                                                                                                                                              /note-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1995-302553/39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 265 AA;
                                                                                                            Misc-difference
                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Misc-difference
                     Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                      Region
                                                                                                                                                                                                                                                                                                                                                                                      Region
       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Single chain gonadotropin analogue 1b with extra glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequence is an analogue of mature hCG beta subunit having residues 40, 42, 45-48, 52, and 55 replaced by the corresponding residues in the equine LH protein. The chimeric hormone may be useful for identifying residues which are importent for binding to the human receptor and may also have applications as an immunogen, see AARISO43, AARISO61-RISI25 and AARISO61-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Single chain gonadotropin; human chorionic gonadotropin; hCG;
ppha; beta; subunit; analogue; glycoprotein hormone; fertility;
inhibit; stimulate; increase; lutropin; luteinising hormone; LH;
follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                New glyco-protein hormone analogues - for inducing fertility as
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match

94.6; Score 735; DB 12; Length 145;
Best Local Similarity 94.3%; Pred. No. 2.6e-95;
Matches 132; Conservative 3; Mismatches 5; Indels
Matches 132; Conservative 3; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
1..20
/label= leader
21..165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR86269 standard; Protein; 265 AA..
                                                                                                                                                                                                                                                                                                                                                                                                                   Table V; Page 64; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                     90US-0520703.
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                                                                                                                                                                                                                                                                        Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                              WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 145 AA;
                                      Homo sapiens.
Equus caballus.
                                                                                                                                                              07-MAY-1991;
                                                                                                                                                                                                     08-MAY-1990;
                                                                                           WO9116922-A.
                                                                                                                            14-NOV-1991.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
Peptide
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61 DVRFESIRLPGCPRGVNPVVSYAVALSCRCGPCRRSTTSCGGPKDHPLTCDDPRFQDSSS 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM/RVLQGALPAPPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence is an analogue of mature hCC beta subunit having residues 42, 47, 51, 89, 91, 92 and 99 replaced by the corresponding residues in the human LH protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in mail and female and mails. See ARRISOG1. RISI325 and ARRISIG1-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH; CG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94.2%; Score 732; DB 12; Length 145; 95.0%; Pred. No. 4.9e-59;
Live 1; Mismatches 6; Indels
                                                                                              AAR15125 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR15092 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                       11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 95.0
Matches 133; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Moyle WR;
                                                                                                                                                                                                                                  hCG/hLH chimera, Al0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hCG/hTSH chimera, C5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                         Homo saplens.
                                                                                                                                                                                                                                                                                                                                                                                                                       WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-NOV-1991.
                                                                                                                                               AAR15125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR15092;
                                                 RESULT 109
AAR15125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 110
AAR15092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ģ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ä
                                                                The sequence is an analogue of mature hCG beta subunit having residues 47.50 deleted and residue 51 changed from alanine to proline. When combined with the alpha subunit this construct has been shown to bind LH receptors and stimulate hos for induced cyclic ANP accumulation at ca. 50% the efficacy of hCG. This reduces the sterologemic potency of the analogue. It may be useful as an agonist for supression of gonadal activity during chamcherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 SKEPLRPRCRPIXATLAVEKEGCPVCITVXTICAGYCPIWIRVLGGVLRALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels 4; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues - for inducing fertility (
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vactines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Glycoprotein hormone; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match
94.28; Score 732; DB 12; Length 141;
Best Local Similarity 96.44; Pred. No. 4, 88-59;
Matches 135; Conservative 0; Mismatches 1; Indels 4
                                                                                                                                                                                                                                                                                                                     AAR15168 standard; Protein; 141 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Table VII; Page 66; 94pp; English.
                                                                                                                                                               122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                          141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      117 SKAPPPSLPSPSRLPGPSDT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                                                 11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                         hCG deletion mutant, F8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 141 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9116922-A.
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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                    The sequence is an analogue of mature hcG beta subunit having to residues 134-145 deleted. It was pred. using PCR matagenesis to residues 134 cop codon into the gene. It may be useful as an agonist for supression of gonada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                    New glyco-protein hormoine analogues - for inducing fertility a immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                           94.1%; Score 731; DB 12; Length 133; 100.0%; Pred. No. 5.6e-59; tive 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glycoprotein hormone; immuno-castration;
fimuno-contragestive; vaccine; human chorionic gonadotropin;
luteinisian hormone; Hi; CG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR15121 standard; Protein; 145 AA.
                                                                                                                                                                                                                                 Table VII; Page 66; 94pp; English.
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                                      (UYNE-) UNIV MED NEW JERSEY
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                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.0
Matches 133; Conservative
                                                                            Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122 SKAPPPSLPSPSR 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 SKAPPPSLPSPSR 133
                                                                                                                   WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hcG/hLH chimera, A6.
                                                                                                                                                                                                                                                                                                                                                                                       Sequence 133 AA;
08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the sequence is an analogue of mature hCG beta subunit having residues 74, 75, 77, 90 and 31 replaced by the corresponding residues in the hTSH 79 protein. The chimeric hormone may be useful as TSH anasonist for the treatment of hyperthycoldism. See AMISO(41, AMISO(61-R1512) and AMISIG1-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                  New glyco-protein hormone analogues - for inducing fertility a immuno-castration agains, for suppressing reproductive system development and as immuno-contragestive vaccines.
            Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive vaccine; human chorionic gonadotropin;
thyroid stimulating hormone; TSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match
94.2%; Score 732; DB 12; Length 145;
Best Local Similarity 95.7%; Pred. No. 4,9e-59.
Best Local Similarity 05.7%; Pred. No. 4,9e-59.
Mismatches 6; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15164 standard; Protein; 133 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Table III; Page 62; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 145 AA;
                                                                                                                                                                                                          07-MAY-1991;
                                                                                                                                                                                                                                                08-MAY-1990;
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                                                                                            Homo sapiens
                                                                                                                                                                   14-NOV-1991.
                                                                                                                             W09116922-A.
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCOCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRFQDSSS 120
                                                                                              Human; chorionic gonadorophin; chorionic gonadotropin; beta-hCG; beta subunit; amino terminal loop; mutan; reduction; LH; vaccine; contragestarise medicament; cross-reactivity; luceinising hormone contraceptive; faminossay; kaposi sarcoma; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is the human chorionic gonadorrophin beta studied the Archy, amino-terminal Loop matchar Lys2Ashar, GluJAkry, Gly2XGLu, ProZAHIS, Val2STyr, Which can be used in the preparation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Modified beta-human chorionic gonadotrophin proteins · useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                       Chorionic gonadotrophin beta subunit amino-terminal loop mutant.
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                                Score 730; DB 12; Length 145;
Pred. No. 7.5e-59;
3; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "wild type Glu replaced with Arg" Misc-difference 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note- "wild type Gly replaced with Glu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , note- "wild type Pro replaced with His" Misc-difference 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              _inter "wild type Lys replaced with Asn" Misc-difference 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note- "wild type Val replaced with Tyr"
                                                                                                                                                                                                                                                                                                                                    AAW27680 standard; protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                Query Match 94.0%; Soc
Best Local Similarity 94.3%; Pro
Matches 132; Conservative 3;
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                                                                                                                                                                                                                         19-JUL-1996; 96WO-GB01717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-JUL-1995; 95GB-0014816.
                                                                                                                                                                                                                                                                                                                                                                                                       12-JAN-1998 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DELV/) DELVES P J. (ROIT/) ROITT I M.
    Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
Misc-difference 20
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Synthetic.
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                                                                                                                                                                                                            0; Gaps
                                                                                                                                                                                                                                                                                                  The sequence is an analogue of mature hCG beta subunit having residues 40, 42, 46-48, 51, 52, and 55 replaced by the corresponding residues in the bovine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, see AAR15043, AAR15061-R15125 and AAR15161-R15198.
                              The sequence is an analogue of mature hCG beta subunit having residues 2, 8, 10, 15, 42, 7 and 51 replaced by the corresponding residues in the human LH protein. The chimerte hormone may be useful in the treatment of infertility in men and women and the promotion of fartility in male and female animals. See AMRISO4, ARRISO61-RISI25 and AMRISO61-RISI28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues - for inducing fertility a immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                         Ouery Match
94.1; Score 731; DB 12; Length 145;
Best Local SIMilarity 95.0%, Pred. No. 6.1e-95;
Matches 133; Conservative 1; Mismatches 6; Indels
Matches 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein hormone; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
luteloising hormone; LH; GG; bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR15099 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Table IV; Page 63; 94pp; English.
Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                      121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                    122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hCG/bLH chimera, D3.
                                                                                                                                           Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-MAY-1990;
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69 RLPGCPRGVNPVVSYAVALSCQCALCRRSTIDCGGPKDHPLTCDDPRPQDSSSSKAPPPS 128
                                                                                                                                                                                                                                                                                                                                                                                             61 RIPGCPRGVMPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAPPPS 120
                                                                                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEKEGCPVCITVŅTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence is an analogue of mature hCG beta subunit having residues 103-105, 107 and 110 replaced by the corresponding residues in the equine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, see AAR15043, AAR15061-R15125 and AAR15161-R15198.
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                Ouery Match 93.74; Score 728; DB 12; Length 137; Best Local Similarity 100.04; Pred. Wo. 1.1e-58; Matches 132; Conservative 0; Mismarches 0; Indels (Matches 132; Conservative 0; Mismarches 0; Mismarch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
lucebinising hormone; LH: CG; equine; horse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 93.7; Score 728; DB 12; Length 145; Best Local Similarity 96.44; Pred. wo. 1.1e-98; Matches 135; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15111 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Table V; Page 64; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   129 LPSPSRLPGPSD 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 LPSPSRLPGPSD 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hCG/eLH chimera, E3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1991-353528/48.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
Equus caballus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1990;
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94.0%; Score 730; DB 18; Length 145;
Best Local Similarity 95.7%; Pred. No. 7.5s-95;
Matches 134; Conservative 0; Mismatches 6; Indels 0; Gaps
of a contragestative medicament. The modified beta-hCC has reduced cross-reactivity with luteniasing homone (LM), as defined by the ability of both proteins to react with the same antibody. The modified beta-hCC can be used as a contraceptive in females, in a vaccine, in a hCC specific immunosasy and for applications where hCC is active, e.g. Kaposi sarcoma inhibition. The modified beta-hCC can produce neutralising antibodies to beta-hCG, which do not cross-react with other natural hormones.

N.B. Sequence not given in the specification, but constructed using the wild type beta-hCG sequence given in nature 307 959460, 37-40 (1994).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence is an analogue of mature hCG beta subunit having residues 1-7 deleted. It may be useful as an agonist for supression of gonada activity during chemotherapy. See AARIS043, AARIS061-R1S125 and AARIS0418198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15165 standard; Protein; 137 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 137 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-MAY-1991;
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ANR 15156
ANR 15156
ANR 15156
ANR 1516
ANR 151
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22 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRESIR 81
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the sequence is an analogue of mature hGG beta subunit having residues 44-99 delated. If was prepd. using PGR mutagenesis to lineart a stop codon into the gene. It may be useful as an agouist for supression of gondali activity during remembeherapy. See AARI3043. ARRIS01-RIS125 and AARIS161-RIS199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues - for inducing fertility (
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                      AAR15167 standard; Protein; 139 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hCG deletion mutant, F7.
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                                                                                                                                                                                   130 PSPSRLPGPSDT 141
                                                                                                                                                                                                                        142 PSPSRLPGPSDT 153
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This sequence represents a human chorionic ganadotrophin (hCG) beta subunit mattern. The invention relates to amethod of forming a cysteine thou protein (1) having alpha and beta-subunits comprising attaching a dimerisation domain (DD) to either the N-termin of both subunits or the dimerisation domain (DD) to either the N-termin of both subunits or the dimerising the products to form a heterodimeric protein analog (III). The method is used to produce analogues (goolists or analoguists) of deglycosylated glycoprotein hormongs, potentially useful, e.g. for treating infertility where caused by polycystic ovarian disease of associated with excessive levels of luteinising hormone). Products that retain DD's are also useful as immunogens or antiques (since a DD may containing highly antiquent class the formation of heterodimers, that have similar structures (and thus receptor-binding and immunogenic properties) to native dimers, and allows the combination of subunits that the production produced produc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; mutein; Beta subunit; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGVPRHQLTADDPREQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                      Human chorionic gonadotrophin beta subunit mutant.
                                                                                                                                                                                                                                                           AAY43266 standard; Protein; 158 AA.
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                                                                        13-APR-1999; 99WO-US08018.
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                                                                                                                                                                                                                                                                                                                                                                  19-JAN-2000 (first entry)
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N-PSDB; AAZ31734.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                  AAY43266;
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RESULT 119

10 CRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRFESIR 69

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The sequence is an analogue of mature hCG beta subunit having residues 39, 41-43, 55, 56, and 88 replaced by the corresponding residues in the hFSH protein. It was prepd. by site directed mutagenesis of a cDNA sequence encoding the hCG beta subunit. The chimerit bormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR1S04). AAR15061-R15135 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as immuno-castration agenits, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 93.3%; Score 725; DB 12; Length 145; Best Local Similarity 95.0%; Pred, No. 2.1e-58; Matches 313; Conservative 0; Mismatches 7; Indels (
             Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccher human chorionic gonadotropin;
fullitie etimulating hormone; PSH: GG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccher, human choritonic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15064 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                   90US-0520703.
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                                                                                                                                                                                                                                                                                    Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hcg/hFSH chimera, B4.
                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 145 AA;
                                                                                                                                                                                 07-MAY-1991;
                                                                                     Homo sapiens.
                                                                                                                                                                                                                 08-MAY-1990;
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                                                                                                                                                  14-NOV-1991.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence is an analogue of mature hos beta subunit having residues 105-107, 10 and 113 replaced by the corresponding residues in the bowine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, see AAR15043, AAR15061-R15125 and AAR15161-R15198.
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                                                                                                                                                               Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccince; human chorionic gonadotropin;
luteinising hormone; LH; GG; bovine.
AAR15104
ID AAR15104 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Campbell RK, Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI: 1991-353528/48.
                                                                                                                                hCG/bLH chimera, D8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-1990;
                                                                                                                                                                                                                                 Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                  WO9116922-A.
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                                                            AAR15104;
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Gaps

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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                      The sequence is an analogue of mature hcG beta subunit having residues 42, 47, 51, 77, 83, 89, 91, 92 and 99 replaced by the corresponding residues in the human LH protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals. See AAR1904, AAR15061-RI3125 and AAR15161-RI3198.
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                                                                New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence is an analogue of mature hCG beta subunit having residues 73-81, and 83 replaced by the corresponding
                                                                                                                                                                                                                                                                                                                                                                 QQuery Match 8 Soors 718, DB 12: Length 145; Best Local Similarity 92.94; Pred No. 9.2e-58; Matches 130; Conservative 3; Hismatches 7; Indels Matches 130; Conservative 3; Hismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSB; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15067 standard; Protein; 145 AA.
                                                                                                                                              Table VI; Page 65; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hCG/hFSH chimera, B7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                            Sequence 145 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9116922-A.
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AAR15067
ID AAR1506
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4; Gaps
                                                                                                                                                                                                                                           New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
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Q2.41; Score 718; DB 12; Length 145;
Best Local Similarity 94.44; Pred. No. 9,2e-89

Matches 134; Conservative 1; Mismarches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycoprotein hormone; immuno-castration;
immuno-contrageslive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH: GG.
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                                                                                                                                                                                                                                                                                                                      Table II; Page 61; 94pp; English.
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                                                                                                                                                                                                   WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 145 AA;
                                     07-MAY-1991;
                                                                             08-MAY-1990;
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14-NOV-1991.
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AAR15122
ID AAR1512
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7; Indels 0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 SREPLRPWCHPINAILAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The sequence is an analogue of mature hCG beta subunit having residues 2, 8, 10, 15, 77, 84, 83, 19, 97, and 99 replaced by corresponding residues in the human LH protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals. See ARISO43, ARRISO61-RISI23 and ARRISO61-RISI33 and ARRISO61-RISI39.
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                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising hormone; LH: CG.
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   Best Local Similarity 93.7%; Pred. No. 1.9e-57;
Matches 133; Conservative 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                  AAR15124 standard; Protein; 145 AA.
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                                                                                                                                                                120 SSSKAPPPSLPSPSRLPGPSDT 141
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Best Local Similarity 92.1%
Matches 129; Conservative
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                                                                                                                                                                                                                                                                                                                                                        hCG/hLH chimera, A9.
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AAR15124
ID AAR1512
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                                                                                                                                                                                                                                                                  62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                  61 DVRFESIRLPGCAHHADSLYIYPVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                       q; Gaps
residues in the hESH protein. It was prepd by site directed mutagenesis of a robb sequence encoding the hCG bets subunit. On the Chimaric formone is capable of directing hormone binding to both this and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15043, AAR15061-R15125 and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The sequence is an analogue of mature hCG beta subunit having residues 89, 91, 92, and 95-99 replaced by the corresponding residues in the hTSH protein and residue 94 deleted. The chimeric hormone may be useful as a TSH antagonist for the treatment of hyperthyroidism. See AMRISO43, AMRISO43, AMRISO41-RISI23 and AARIS161-RIS198.
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9.11; Score 716; DB 12; Length 145;
Best Local Similarity 92.94; Pred. No. 1.44-57;
Matches 100; Conservative 3; Mismatches 7; Indels
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Immuno-contragestive; vaccine; human chorionic gonadotropin;
thyroid stimulating hormone; TSH; GG;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hCG/hTSH chimera, C6
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                                                                                                                     Sequence 145 AA;
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OB 12; Length 144;

92.0%; Score 714.5;

Query Match

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This sequence is a fusion protein of HLM/HCG and Jun. The invention relates to a method of forming a cysteline knot protein (1) having alpha and beta-subunits comprising a traching a dimerisation domain (DD) to either the N-termin of both subunits or the N-terminus of the cather subunit and to the products to form a heterodimeric protein analog (II). The method is used to produce analogues (aspoils so re nategonists) of deglycosylated cused to produce analogues (aspoils so rantegonists) of deglycosylated the products to form a heterodimeric protein analog (II). The method is used to produce analogues (aspoils so rantegonists) of deglycosylated (the caused by polycystic ovarian disasse (associated with excessive cused to polycystic ovarian disasse (associated with excessive cather and and the analogue of a thicking to the deterodimers, that have shall ar structures and thus receptor-binding and immunogenic properties) to native dimess, and thus receptor-binding and immunogenic properties to native dimess, and thus receptor-binding and subunites that would other-vise combiner of poorly, or not at all. The N-terminal part of a glycoprotein hormone may formation of homodimers. Here and a disconment of the bording and individual subunits:

Contraction of homodimers. Hererodimers have lead the protect in times in the volume of a catherity, and attachment of the protect in times in the volume of the produces of a catherity and attachment of the produces of catherity and attachment of the produces in times in the volume of the produces of the produ
                                                                                                                                                                     Cystaine knot protein; protein formation; heterodimenic protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Watch 90.5%; Score 703; DB 20; Length 209; DB set Local Similarity 90.7%; Pred. No. 3.1s-56; Watches 127; Conservative 5; Wismatches 8; Indels
                                                                                                           HLH/HCG beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 7; Fig 20; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0059625.
                                  19-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 91.1%; Score 708; DB 12; Length 145; Best Local Similarity 94.3%; Pred. No. 7.4e-57; Matches 113; Conservative 2; Mignatches 6; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive wacotnes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glycoprotein hormone: fertility; immuno-castration;
Immuno-contragestione; vaccine; human chorionic gonadotropin;
Indilicie stimulatios hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 127
AAX43300
ID AAX43300 standard; Protein; 209 AA.
X AAX43300;
                                                                                                                                                                                                                                                        AAR15080 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-MAY-1991; 91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                 11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hCG/hFSH chimera, B20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1991-353528/48.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-MAY-1990;
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8; Indels 0; Gaps
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                                                                                                                                                                                                                                                                                                                         New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
  Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccine; human chorlonic gonadotropin;
thyroid stimulating hormone; TSH: CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 90.0%; Score 699; DB 12; Length 145; Best Local Similarity 93.6%; Pred. no. 4.98-58; Matches 13; Conservative 1; Wismatches 8; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glycoprotein hormone; fertility; Immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
thyroid stimulating hormone; TSH; GG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR15088 standard; Protein; 138 AA.
                                                                                                                                                                                                                                                                                                                                                                                      Table III; Page 62; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                             90US-0520703.
                                                                                                                                                             91WO-US03162.
                                                                                                                                                                                                                           (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                         Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hCG/hTSH chimera, Cl.
                                                                                                                                                                                                                                                                                           WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 145 AA;
                                                                                                                                                             07-MAY-1991;
                                                               Homo saptens.
                                                                                                                                                                                             08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo saplens.
                                                                                               WO9116922-A.
                                                                                                                             14-NOV-1991.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The sequence is an analogue comprising amino acids 7-145 of mature hGG beta subunit having residues 7, 8, 10, 11, 12, 14, 16, and 18 replaced by the corresponding residues in the hFSH procein. It was prepd by site directed mutagenesis of a cDNA sequence encoding the hGG beta subunit. The chimmert horamone is capable of directing horamone binding to both LM and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15043, AAR15062-R15125 and AAR15161-R15198).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                  New qlyco-protein hormone analogues - for inducing fertility as immuno-casitation agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                           Glycoprotein hormone, fertility, immuno-castration;
immuno-contragestive, vaccine, human chorionic gonadotropin;
follicie stimulating hormone; FSR; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

Q0.11; Score 700; DB 12; Length 139;
Best Local Similarity 95.54; Pred. No. 3.8e-56

Matches 126; Conservative 2; Mismarches 4; Indels
AAR15061 standard; Protein; 139 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15094 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                    (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                         91WO-US03162.
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                                                           11-FEB-1992 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                    Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130 PSPSRLPGPSDT 141
                                                                                           hCG/hFSE chimera, B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   123 PSPSRLPGPSDT 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hCG/hTSH chimera, C7.
                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 139 AA;
                                                                                                                                                                                                                                                                                      07-MAY-1991;
                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                    08-MAY-1990;
                                                                                                                                                                                                                         W09116922-A.
                                                                                                                                                                                                                                                         14-NOV-1991.
                             AAR15061;
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90US-0520703.

08-MAY-1990;

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The sequence is an analogue of mature hCG beta subunit having residues 39, 41-43, and 45-53 replaced by the corresponding residues in the hFSH protein. The chimeric hormone is capable of directing hormone blading to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animais. (See AAR15043, AAR15061-RIS125 and AAR15061-RIS125 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                        The sequence is an analoque of mature MCG beta subunit having residues 94-96, 103-105, 107, 110 and 112-115 replaced by the corresponding residues in the equine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agonist and/or antagonist.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing fertility a 
limmuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                     Length 145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycoprotein hormone; fertility; immuno-castration;
Immuno-contrageslive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                               Query Match 89.3%; Score 694; DB 12; Length 14: Best Local Similarity 92.1%; Pred. Mo. 1.4e-5; Matches 9; Indels Matches 12; Conservative 2; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR15084 standard; Protein; 145 AA.
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                        Table V; Page 64; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hCG/hFSH chimera, B24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1991-353528/48.
                                                                                                                                                                                                                                                       Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15084;
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AAR15084
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                                                                                                                                                                                                                                                                                                                 The sequence is an analogue of mature hoft bets subunit having residues 1.7 deleted and residues 8. 10.12-14 and 16-18 replaced by the corresponding residues in the hYSR protein. The chimeric hormone may be useful as TSR anaequated for the treatment of hyperthyroidism. See AMRIG46. AMRIG61-815125 and AMRIS61-813199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRFESIR 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 CIPTEYTHHIEKEGCPVCITVNTTICAGYCPIMTRVLQGVLPALPQVVCNYRDVRESIR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New glyco-protein hormone analogues - for inducing fertility as immuno-eastration against, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                         New glyco-protein hormone analogues - for inducing fertility a immuno-cosfitation agents, for appressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 89.3%; Score 694; DB 12; Length 138; Best Local Similarity 94.7%; Pred: No. 1.13e-75; Matches 125; Conservative 2; Mismatches 5; Indels Matches 125; Conservative 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising hormone; LH; CG; equine; horse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR15113 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                   Table III; Page 62; 94pp; English.
                                     (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-FEB-1992 (first entry)
                                                                                   Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 130 PSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 PSPSRLPGPSDT 133
                                                                                                                           WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hCG/eLH chimera, E5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 138 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
Equus caballus.
                                                                                   Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15113;
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AAR15113
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us-09-813-398-3.default.rag

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(especially post-conception). The adapted peptides allow production of vaccines from endogenous proteins, which are not normally immunogenic.
                                                                                                                                                                                                    Score 687.5; DB 19; Length 132;
Pred. No. 4.9e-55;
0; Mismatches 0; Indels 13; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sequence is an analogue of mature hCC beta subunit having residues 39, 41-50, 53, 55 and 58 replaced by the corresponding residues in the hTSH protein and the sequence LFL from hTSH Insertred in place of residue 47. The chimeric hormone may be useful sea 31 SH antagonist for the treatment of hyperthyroidism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLAPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTHTRVLQG--VLP--ALPQVV 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New glyco-protein hormone analogues - for inducing fertility as
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Glycoprotein hormone; fertility; lamuno-castration;
limnuno-contrageslive; vaccine human chorionic gonadotropin;
thyrold stimulating hormone; TSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match

88.2; Score 685; DB 12; Length 147;
Best Local Similarity 91.0%; Pred. NO. 9.2e.55;
Matches 111; Conservative 1; Mismatches 6; Indels 6
                                                                                                                                                                                                                                                                                                                                                                               AAR15090 standard; Protein; 147 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Table III; Page 62; 94pp; English.
                                                                                                                                                                                                                                                                     122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                    108 SKAPPPSLPSPSRLPGPSDT 127
                                                                           Query Match 88.5%;
Best Local Similarity 90.7%;
Matches 127; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                            11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hCG/hTSH chimera, C3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 147 AA;
                                              Sequence 132 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                            AAR15090;
                                                                                                                                                                                                                                                                                                                                             SXCCCCCXXXXTFFXXXX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents the human chorionic gonadotropin (HCG) beta subunit. The antigenic peptides of the invention are synthetic analogues of regions of this sequence. The peptides are preferably analogues of HCG modification of this sequence. The peptides are the antigenic modification of peptides. The peptides can then be coupled to carrier elicit anti-HCG antibodies (but at a lower level than the native peptide) and do not elicit antibodies (but at a lower level than the native peptide) and do not elicit antibodies to human luterinishing hormone. The conjugates can be used for vaccine development or to produce polytional antisera for danostic assays. Depending on the peptides used, the vaccines can be used to treat hormone and endocribe related tumours, cancers, hypertension (especially using anglotensin related peptides), and diabetes and associated vascular diseases, or as anti-pregnancy vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antigenic peptide; HCG; human chorionic gonadotropin; vascular disease; antigenic modification; immunogenic conjugate; vaccine development; anti-pregnancy vaccine; hormone related tumour; endocrine related tumour; cancer; hypertension; angiotensin; diabetes; therapy.
                                                                                                                                                                        Query Match 88.7%; Score 689; DB 12; Length 145;
Bost Local Similarity 91.5%; Pred, No. 3, 9-55;
Matches 310; Conservative 1; Mismatches 7; Indels 4; Gaps
                                                                                                         wodified human chorionic gonadotrop\Deltan beta sub:unit peptide(s) - wedil for producting immunogenic conjugates with proteins that are not normally immunogenic, for use as vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                              Human chorionic gonadotropin beta subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Column 19; 81pp; English
                                                                                                                                                                                                                                                                                                                 RESULT 133
AAM69449
ID AAM69449 standard; peptide; 132 AA.
XX
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85US-0804642.
87US-0086401.
92US-0958601.
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                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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                Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-OCT-1992;
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04-DEC-1985;
17-AUG-1987;
06-OCT-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stevens VC;
                                                                                                                                                                                                                                                                                                                                                                               AAW69449;
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AAW99535 standard; Protein; 165 AA.

1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYC -- MTRDINGKLFLPKYALSQDV 58

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the invention relates to the production of analogues of a heterodimeric subunit glycoporotein hormone (GPR) e.g. human chorionic gonadotropin (CC (hCG), human lutefnising hormone (HFSH), human cluteinising hormone (hFSH), human cluteinisty and functional muterins, which are modified to contrain an intersubunit distiplied bond, between an alpha-subunit cystelia and iterasubunit cysteliae, for improved stability, the analogue retaining at least a portion of the injocativity for the corresponding native GPR receptor. This sequence to represents a chimaric horgyles are designed specifically to reduce perturbation of the Judoved analogues are designed specifically to reduce perturbation of the Judoved analogues are designed specifically to reduce perturbation of the Judoved analogues are designed specifically to reduce perturbation of the Judoved analogues are designed specifically corresponding greater likelihood that the dimer vill be formed in vivo and the formed dimer vill have affinity for the native receptors and have again the biological activities of the hormones. The analogues can have uses
                                                                                                                                                                                                                                       Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chorionic gonadotroph; human luteinfsing hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPUTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEREGCPVCITVNTTICAGTCPTWTRVLQGVLPALPQVVCNTR 61
11 SKEPLRPRCRPINATLAVEREGCPVCITVNTICAGTCPTHTRVLQGVLPALPQVVCRTR 80
1 SKEPLRPRCRPINATLAVEREGCPVCITVNTICAGTCPTHTRVLQGVLPALPQVVCRTR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH or fifty, have an intersplunit distulphide crosslink between the alphar and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86.9%; Score 675; DB 20; Length 165; 91.4%; Pred. No. 8.4e-54;
Live 0; Mismatches 12; Indels
                                                                                                                                                                                  hCG/hFSH chimeric beta subunit CFC101-114-beta'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Fig 10A; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98WO-US13070.
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                                                                                                                         08-JUN-1999 (first entry)
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Best Local Similarity 91.4
Matches 128; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-081219/07.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W09858957-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Moyle WR;
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                                                    Query Match 86.9%; Scord 675; DB 12; Length 123; Best Local Similarity 100.0%; Pred. No. 6.2e-54; Matches 123; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The sequence is an analogue of mature hCG beta subunit having residues 124'14' deleted. It was prepd. using PCR mutagenesis to insert a stop codon into the gene. It may be useful as an agonist ca supression of general activity during themotherapy. See ANRIOG18. ANRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New glyco-protein hormone analogues - for inducing fertility a immuno-castration agents, for auppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                             AAR15163 standard; Protein; 123 AA.
                                                                                                                                                                          118 DSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                   119 DSSSSKAPPPSLPSPSRLPGPSDT 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Table VII; Page 66; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hCG deletion mutant, F3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-FEB-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |||
|121 SKA 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9116922-A.
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0; Gaps

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bond;

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The invention relates to the production of analogues of a heterodimeric subunit giyopototein hormone (GPH) = 9. human choicionic gondoutcropin (CC), human lutefalial bromone (HPH), human interiorising hormone (HPH), human therefore the contain an intersubunit disulphide bod, hormone (HPH), human therefore the contain an intersubunit disulphide bod, between an alpha-subunit cysteine, which are modified to contain an intersubunit cysteine, for meterins, which are modified to contain an intersubunit cysteine, for the contain and a beta-subunit cysteine, for the contact proportion attive GH receptor. This sequence to represents a mutant chimaric hCG/hPSH-beta subunit used for generating the modified GPHs. The improved analogues are designed specifically to reduce perturbation of the 3-dimensional structure of the hormone, thereby creating greater likelihood that the dimer vill be formed in vivo and the formed dimer will have affinity for the native receptors and have sential activity on them The changes stabilise the GPHs and prolong the hormones. The analogues can have uses
                                   Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; hhuman chorionic gonadortopin; human lutelaitsing hormone; disulphide boi human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH or Integral in intershult disturbhide crosslink between the alphar and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Watch
Bost Local Similarity 90.7%; Pred. No. 1.99-37;
Watches 177; Conservative 1, Wismatches 12; Indels (
     hCG/hFSH chimeric beta subunit CFC101-114-beta'099C.
                                                                                                                                                                                                                                                                                                                                   (ISTF.) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P.G.
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AAN15166
ID AAN15166 standard; Protein; 128 AA.
XX AAN15166;
AC AAN15166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig 21; 139pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 165 AA;
                                                                                                                                                                                                                                                                                                       25-JUN-1997;
                                                                                                                                                                                         W09858957-A2.
                                                                                                                                    Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                  25-JUN-1998;
                                                                                                                                                                                                                            30-DEC-1998.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequence is an analogue of mature hCG beta subunit having residues 39, 41-43, 45-55, 55, 56, and 58 replaced by the corresponding residues in the hESB protein. It was prepd. by site directed mutagenesis of a cDNA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone bluding to both LH and FSH receptors and may be useful for the treatment of infertility and FSH receptors and may be useful for the treatment of infertility and female animals. (See AAR1504), AAR15061-R15125 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 86.7%; Score 674; DB 12; Length 145; Best Local Similarity 88.7%; Pred. No. 9e-54; Indels 4; Gaps Matches 165; Conservative 3; Mismatches 9; Indels 4; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New glyco-protein hormone analogues - for inducing fertility immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                       Glycoprotein hormone; fartility; immuno-castration;
immuno-contragestive; vacche; human chorionic gonadotropin;
oliticle stimulating hormone; FSH; GG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR15075 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Table II; Page 61; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                   90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYNE-) UNIV MED NEW JERSEY.
                                                                                                           11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Campbell RK, Moyle WR;
                                                                                                                                                   hCG/hFSH chimera, B15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                 08-MAY-1990;
                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                     W09116922-A.
                                                                                                                                                                                                                                                                                                                                          14-NOV-1991.
                                                                           AAR15075;
RESULT 137
AAR15075
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30-DEC-1998.

11-FEB-1992 (first entry)

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the invention relates to the production of analogues of a heterodimeric subunit giyosototein hormone (GFB) 4.9. Numan enforteint gonadotrophin (bCG), human lutefalsing hormone (HEB), human follicle stimulating hormone (HEB), human fulcing stimulating hormone (HEB), and functional cantens, which are modified to contain an intersubunit disulphide bond, between an alpha-subunit cysteine and a beta-subunit cysteine bond, contains a limproved stability, the analogue retaining at least a portion of the improved stability, the analogue retaining at least a portion of the coloractivity for the corresponding native GFH receptor. This sequence crepresents a mutant chimeric hock/heBi-beta subunit used for generating to reduce perturbation of tha 3-dimensional structure of the hormone, to reduce perturbation of tha 3-dimensional structure of the hormone, condition and the formed dimen will have affinity for the native receptors and have against a cativity on them. The changes stabilise the GPHs and prolong as for the native GPHs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Watch 85.7%; Score 666; DB 20; Length 165; Best Local Similarity 90.7%; Pred. No. 5.5e-51; Andels 0; Gaps Matches 173; Conservative 0; Mismatches 133; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New stabilised glycoprotein hormones - particularly hCG, hLH, h
or hTSH, have an infersibunkt disuiphide crosslink between the
alpha - and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein hormone; fertility; Immuno-castration;
immuno-contrageslive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                               (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; F1g 10B; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR15072 standard; Protein; 145 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-US13070.
                                                                                                                                                      25-JUN-1997; 97US-0050784.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-FEB-1992 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 165 AA;
                                                                                      25-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W09116922-A.
                                                                                                                                                                                                                                                                                                                  Moyle WR;
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ARTESOT 141
ARTESOT 2
ARTESOT 2
ARTESOT 2
ARTESOT 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 85.8%; Score 666.5; DB 12; Length 128; Best Local Similarity 87.3%; Pred. No. 3.8e-53; Ondels 17; Gaps Matches 123; Conservative 0; Mismatches 123; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence is an analogue of mature hCG beta subunit having residues 19-55 deleted. It was prepd. using PCR mutagenesis to insert a stop codon into the gene. It may be useful as an agonist for supression of gonadal activity during chemotherapy. See AAR15043, AAR15061-R15125 and AAR15161-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing fertility immuno-castration agaits, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hCG/hFSH chimeric beta subunit CFC101-114-betax37C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW99536 standard; Protein; 165 AA...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Table VII; Page 66; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    104 SKAPPPSLPSPSRLPGPSDT 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                 07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYNE-) UNIV MED NEW JERSEY.
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                                               hCG deletion mutant, F6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 128 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-MAY-1990;
                                                                                                                                                                                                                   Homo sapiens.
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Synthetic.
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                                                                                                                                                                                                                                                                                    W09116922-A.
                                                                                                                                                                                                                                                                                                                                                14-NOV-1991.
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The invention relates to the production of analogues of a heterodimeric subunit giycoporotein hormone (GFH) a.9. human chorionic gonadotropin (hCG), human intensialing hormone (HCH), human fullicle stimulating hormone (HCH), human intensialing hormone (HCH), human fullicle stimulating hormone (HCH), human intensialing hormone (HCH), and intensional materials, which are modified to contain an intersubunit disulphide bond, between an alpha-subunit cysteine, for the containing at least a portion of the binactivity for the corresponding native GPH receptor. This sequence to represents a mutated hGG-beta subunit trained spread analogues are designed specifically to modified GPHs. The improved analogues are designed specifically to the corpus and the formed analogues are designed specifically to the corpus greater likelihood that the diene vill be formed in vivo and the formed diene vill have affinity for the native receptors and have agond the biological activities of the hormones. The analogues can have uses a for the native GPHs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match 84.2%; Score 654; DB 20; Length 142; Best Local Similarity 98.4%; Pred. No. 5.8e-52; Indels 0; Gaps Matches 120; Conservative 0; Mismatches 2; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 SKEPICPRCRPINATLAVEKEGCPVCITVNTTICAGCCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2. SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH or hTSH, have an intersubult distubhide cossilnk between the olpha- and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vacture; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                    Example 15; Page 97; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR15076 standard; Protein; 145 AA.
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                                                                                                                        WPI; 1999-081219/07.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                 Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR15076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 143
AAR15076
ID AAR1507
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chortonic gonadotropin; human lutefacilising hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 84.8%; Score 659; DB 12; Length 145; Best Local Similarity 89.3%; Pred. No. 2.1e-5; Marches 125; Conservative 2; Mismatches 13; Indels. 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequence is an analogue of mature hCC beta subunit having residues 102-107, 109 110, and 112 list sepiace by the corresponding residues in the hFSH protein. It was prept. By site directed mutagenesis of colks sequence encoding the hCC beta subult. The and FSH receptors and may be useful for the treatment of both it in men and women and he useful for the treatment of infertility and female animals. (See ARRISO43, ARRISO41-RISI23 and
                                                                                                                                                                                                                                                                       New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein hormone analogue hCG-beta'-R6C, Y37C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW99526 standard; Protein; 142 AA.
                                                                                                                                                                                                                                                                                                                                                      Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                     90US-0520703.
                                                          91WO-US03162.
                                                                                                                                            (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-0050784.
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                                                                                                                                                                                   Campbell RK, Moyle WR;
                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 145 AA;
                                                        07-MAY-1991;
                                                                                                     08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W09858957-A2.
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Synthetic.
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The sequence represents the amino acid sequence of single chain goods.

The sequence represents the amino acid sequence of single chain goodscropin analogue 12. The giveoprotein homeone analogue 18.

Goodscropin analogue 19. The giveoprotein homeone and country is a substitute for the heterodinaric forms of the homeone, computed, as a substitute for the heterodinaric forms of the homeone. The single chain protein is further useful as a reagent in a commone. The single chain protein is further useful as a reagent in a more similar to the heterodinary as a disponsite tool to detect the commone. The single chain protein is further useful as a reagent in a common and the presence of antibodies with respect to the native proteins in the biological samples, as a control reagent in assay kits for assessing the presence of antibodies with respect to the native proteins in the puritying receptors to which the native homeones bind. The single chain forms of the heterodimers have the following advantages over their dimeric forms: they are more stable, problems of recombinant protein are reduced since only a single enter is needed to transcribe, curtainste and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives. Single chain forms are unique starting materials for identifying truncated forms with the activity of the dimer. The linkage between the subunits permits the protein to be engineered without disturbing the overall folding of the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; single chain gonadotropin analog no:2; anti-infertility; drug; peptide therapy; luteiniaing hormone; LH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; Infertility; fusion protein.
                                                                                                                       New single chain forms of the glycoprotein hormone quartet useful for generating antihodies specifically immunoreactive with the new compounds in treating infertility, or as aids for in vivo fertilization techniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 95.2%; Pred. No. 3.44-51.
Aschiosal Similarity 95.2%; Pred. No. 3.44-51.
Aschosa Il8; Conservative 0; Mismatches 6; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human single chain gonadotropin analog no: 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cocation/Qualifiers
21..134
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                                                                                                                                                                                                                                                                            Example 6; Fig 6; 86pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-SEP-2001 (first entry)
                                                WPI; 2001-424301/45.
N-PSDB; AAS08487.
Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141 GSAP 144
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Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 145
AAE04475
XX AAE04475
XY XY AAE04475
XY W GEP-
XX HUMAN ;
XX HUMAN 
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Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                               The sequence is an analogue of mature hCG beta subunit having residues 39, 41-43, 45-55, 55, 56, 58, and 49-97 replaced by the corresponding residues in the hESH protein. It was pread, by site directed mutagenesis of a cOMA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone binding to both lift and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AARISO41-R15125 and AARIS161-R15198).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60 YRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 SKEPLRPRCRPINATLAVEREGCPVCITVNTICAGYCYTRDLVYKD--PARPKIGKTCT 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQV--VCN 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; glycoprotein hormone; infertility; in vivo fertilisation;
single chain gonadotropin.
                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing fertility a immuno-castration agants, for appressing reproductive system development and as immuno-contragestive wacthes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 633: DB 12: Length 145; Best Local Similarity 85.98; Pred No. 7.3e-52; Matches 122; Conservative 4; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Single chain gonadotropin analogue #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAU04603 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                   Table II; Page 61; 94pp; English.
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940S-0199382.
940S-0289396.
940S-0334628.
940S-0351891.
950S-0475649.
                  (UYNE-) UNIV MED NEW JERSEY.
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                                                                      Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UNIW ) UNIV WASHINGTON.
                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-AUG-1997;
18-PEB-1994;
12-SEP-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAX-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUN-2001.
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1 SKEPLRRFRPRIATLATEREGCFVCITVNTTICAGTCPTWTRULGGVLPALPQVVCNTR 60
1 SKEPLRRFRPRIATLATEREGCFVCITVNTTICAGTCPTWTRULGGVLPALPQVVCNTR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence is an analogue of mature hcG beta subunit having residues 117-145 deleted. It was preped, using PCR matagenesis to residues a procedon into the gene. It may be useful as an agonist for supression of gonadal setUvity during chemotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New glyco-protein hormone analogues - for inducing fertility .
Immuno-castration agents, for uppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82.94; Score 644; DB 12; Length 116; Best Local Similarity 100.04; Pred. No. 3.8e-51. Best Local Similarity 100.04; Pred. No. 3.8e-51. Makerches 116; Conservative 0; Mismarches 0; Indels 0
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                                                                                                                                                                                                                                                                                                                                                                             AAR15162 standard; Protein; 116 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-MAY-1991; 91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hCG deletion mutant, F2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 116 AA;
                                                                                                                        122 SKAP 125
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                                                                                                                                                                                           141 GSAP 144
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                                                                                                                                                                                                                                                                                                     RESULT 146
AAR1516
XX AAR1516
XX AAR1516
XX AR1516
XX II-FEB-
XX I
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to human single chain forms of the glycoprotein charactery which is an agonist or antagonist of lucial singly bormone consomment of the consomment of th
/note- "Corresponds to 1-114 amino acids of human choich gonadotropin (CG) beta-subunit. 115..142
/note- "Linker peptide" 143..234
/note- "Corresponds to 1-92 amino acids of human single chain gonadotropin alpha-subunit"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
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94US-0289396.
94US-0310590.
94US-0334628.
94US-0351591.
95US-0475049.
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N-PSDB; AAD08787.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                           US6238890-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                           25-AUG-1997;
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                                                                        Region
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19-JAN-2000 (first entry)

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This sequence is a fusion protein of hcc/HESH and Jun. The Invention relates to a method of forming a cystelia knot brotein (i) having a alpha can beta-subunits comprising attaching a dimerisation domain (DD) to either the N-termina of both subunits or the N-termina of the other subunit and to the C-termina of the beta-subunit and dimerising to the products to form a hererodimeric protein analog (II). The method is the products to form a hererodimeric protein analog (II). The method is used to produce analogues (sgonists or antagonists) of deglycosylated glycoprotein hormones, potentially useful, e.g. for treating infertility where caused by polycystic ovarian disease (associated with excessive lavels of lutelnising hormone). Products that retain DD is are also useful as immunogens or antigens (since a DD may contraining highly antigenic cannon acid sequences). Attachment of a DD (Which may be removed later) facilitates the formation of heterodimers, that have similar structures and allows the combination of subunits that vancid otherwise combines.

Contain allows the combination of subunits that vancid otherwise combines.

Containing the definition of subunits that vancid otherwise combines.

Containing the value of subunits and attachment of the DD reduces (formation of homodimers have longer circulation times in
                                                                                                  Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRRQDSSS 121
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86.4%; Pred. No. 2.1e-50;
Live 3; Mismatches 16; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                        HCG/hFSH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 149
AAY43296
ID AAY43296 standard; Protein; 273 AA.
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Best Local Similarity 86.4%
Matches 121; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-APR-1999;
                                                                                                                                                                                                                                                         Homo sapiens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence is a fusion protein of hGC/HESH and Jun. The Invention relates to a method of forming a cysteine knot protein (i) having a lipha and relates to a method of forming a cysteine knot protein (ii) having a lipha and beta-subunits compension of the ethics of the winter the Witemini of both subunits or the Witemini of the citizenia of the combination of the conduction of the conduction of the conduction of subunits that would otherwise combine of the conduction of subunits that would otherwise combine of the conduction of subunits that would otherwise combine of the conduction of subunits that would otherwise combine of the conduction of subunits that would otherwise combine of the conduction of subunits. The Witeminia part of a glycoprotein hormone may be modified without loss of activity, and attachment of the Dorduces of conduction of the conduction of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                  Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match

82.41; Score 640; DB 20; Length 212;
Best Local Similarity 86.44; Pred. No. 1.6e-50.

Matches 121; Conservative 3; Mismarches 16; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 148
AAA1289
ID AAK1289 standard; Protein; 273 AA.
XX AAK13289;
XX XX XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 4; Fig 17; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             188 SKAPPPSLPSPSRLPGPSDT 207
                                                                                                                                                                                                                                                                                                                                                                   99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0059625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-620431/53.
                                                                                                                                                                  Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                 WO9953065-A1.
                                                                                                                                                                                                                                                                                                                                                               13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                       14-APR-1998;
                                                                                                                                                                                                                                                                                                          21-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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Analogue 2 (human CG-beta(1-114)-linker-human CG-alpha(1-92)) is especific example of a single chain goadoctropin having a chorioni gonadotropin (CG) beta-subunit at the V-terminus and a CG alpha-subunit at the C-terminus, joined by a linker of 1-16 anino acida. The analogue has lutelnising hormone (lutropin) activity and is useful for inducing ovulation and increasing male fertility.
                                                                                                                                                Single chain gonadotropin; human chorionic gonadotropin; hCG; alpha; beta; subunit; analogue; glycoprotein hormone; fertility; inhabit; stimulate; increase; lutropin; luteinising hormone; LH; folilcle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Methods for altering fertility in mammals, esp. humans - e.g. stranuating fertility by reducing the activity and/or levels of stroutating glyco:protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82.2%; Score 639; DB 16; Length 234; 94.4%; Pred. No. 2.2e-50; Live 0; Mismatches 7; Indels 0
                                                                                                                                                                                                                                                                                                                                                //micter *Arg corresponds to CCG codon*
1135-124
/Abble* linker
/Abble* conadotropin_alpha_subunit_(1-92)
                                                                                                                                                                                                                                              Location/Qualiflers
1...50 leader
21...134 hCC_beta_subunit_(1-114)
:e 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 13 and Claim 39; F19 7; 102pp; English.
                                                                                                                      Single chain gonadotropin analogue 2.
RESULT 150
AAR86248
ID AAR86248 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-FEB-1994; 94US-0199382.
                                                                                       26-APR-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 82.2
Best Local Similarity 94.4
Matches 117; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1995-302553/39.
N-PSDB; AAT03219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                      Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                              W09522340-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-AUG-1995.
                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Moyle WR;
                                                           AAR86248;
                                                                                                                                                                                                                                                            Key
Peptide
                                                                                                                                                                                                                                                                                                       Region
                                                                                                                                                                                                                                                                                                                                                                  Region
                                                                                                                                                                                                                                                                                                                                                                                               Region
                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This sequence is a fusion protein of HCC/HTSH and Jun. The invention calcidates to a method of forming a cystein knot protein (1) having alpha can beta-subunits comprising attaching a dimerisation domain (DD) to either the N-termino of the catternial of both subunits or the N-termino of the cather the N-termino of the beta-subunit and to have so the comprision of the cather of the C-terminus of the beta-subunit and dimerising the products to form a heterodimeric protein analog (II). The method is compressed to produce analogues (sponiats of antagoniss) of deglycosylated glycoprotein hormance, potentially useful. e.g. for treating infertility where caused by polycystic ovarian disease (associated with excessive cathers of internialing hormone). Products that retain DD's are also useful as amminogened or antigens (since a DD may containing highly antigenic cannon acid asquences). Attachment of a DD (which may be removed later). Another combination of heterodimers, that have similar structures and allows the combination of subunits that would otherwise combines, and allows the combination of subunits that would otherwise combines. On the condition of subunits that would otherwise combines. CC condition of homodimers. Heterodimers have longer circulation times in vivo than individual subunits.
                                                                                                   Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 82.41; Score 640; DB 20; Length 273; Best Local Similarity 86.44; Pred. No. 2.18-50; Makches 121; Conservative 3; Mismatches 16; Indels (Matches 121; Conservative 3)
                                                                       HCG/HFSH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 6; Fig 19; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US08018.
                                                                                                                                                                                                                                                                                                                      98US-0059625.
                                            19-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                  (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 273 AA;
                                                                                                                                                                                                                                                                                       13-APR-1999;
                                                                                                                                                                                 Homo sapiens.
Synthetic.
                                                                                                                                                                                                                              W09953065-A1.
                                                                                                                                                                                                                                                                                                                    14-APR-1998;
                                                                                                                                                                                                                                                          21-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                 Moyle WR;
              AAY43296;
셤
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The invention relates to human single chain forms of the glycoprotein chromone quarter. Which is an agonist or antagonist of lutefabilisting hormone (LH), follicle stimulating hormone (FSH), thyroid stimulating hormone (FSH), thyroid stimulating hormone (FSH), thyroid stimulating hormone (FSH), threse hormones are heteroflamers having identical alpha subunits and differing bets subunits. The agonist favors of single chain hormones are used in treating infertility, as aids in vitro fertilisation techniques, and other therapeutic methods as sociated with the native hormones. The single chain hormones are used in associated with the native hormones. The single chain hormones are used in detect the presence of antibodies with respect to the native proteins in biological samples, as control respect to the native proteins in biological samples, as control respects in assay kits for assessing the levels of these hormones in various samples, in detecting and purifying
                                                                                                                                                                                                                                                                                                                                                                                                                           Region 135.142
//note- Linker peptide*
Region 143.234
/note- "Corresponds to 1-92 amino acids of human single
Misc difference 194
                                                                                           Human; single chain gonadotropin analog no:2a; anti-infertility; drug; peptide therapy; luteinising hormone; LH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein; mutant; mutent.
                                                                                                                                                                                                                                                                                                       /note- "Wild type Asn substituted with Kaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                       /note= "Wild type Asn substituted with Xaa, Where Xaa
refers to Gln or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note- "Hild type Asn substituted with Xaa, Where Xaa Nisc-difference 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note- "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
                                                                                                                                                                                                                       Location/Qualifiers
21..134
/note= "Corresponds to 1.114 amino acids of human
chorionic gonadotropin (CG) beta-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other inferapeutic methods associated with the native hormones
                                                            Human single chain gonadotropin analog no:2a.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 9; Column -; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              940S-0199382.
940S-0289396.
940S-0310590.
940S-034628.
940S-01351591.
950S-0475049.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-0918288.
                   04-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-366474/38.
                                                                                                                                                                                                                                                                                                                   Misc-difference
                                                                                                                                                                                                                                                                                                                                                                        Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-AUG-1997;
                                                                                                                                                                                     Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US6238890-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAY-2001.
                                                                                                                                                                                                                                          Key
Region
       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The sequence is an analogue of mature hCG beta subunit having residues 94.97, 10.2-107, 100, 110, and 112-118 replaced by the corresponding residues in the hFSH protein. It was prepd. by site directed mutagenesis of a DNA sequence encoding the hCG beta subunit. The chimeric hornome is capable of directing hornome blunding to both id and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15043, AAR15061-R15125 and AAR15161-R15198).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTNTRVLGGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 82.1%; Score 638; DB 12; Length 145; Best Local Stallarity 86.4%; Pred. No. 1.74-97; Matches 12; Conservative 3; Migmatches 16; Indels (
                                                                                                                                                                                                                                             immuno-castration;
man chorionic gonadotropin;
                                                                                                                                                                                                                                     Glycoprotein hormone; fertility; immun immuno-contragestive; vaccine; human c follicle stimulating hormone; FSH; CG;
                                                                                       AAR15073 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAE04509 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                               11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Campbell RK, Moyle WR;
                                                                                                                                                                                                    hCG/hFSH chimera, Bl3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAY-1990;
141 GSAP 144
                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                       14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                W09116922-A.
                                                                                                                             AAR15073;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAE04509;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
AAE04509
ID AAEC
XX
AC AAEC
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The sequence represents the amino acid sequence of human chorionic conadortropin (160) beta, amino acids 111. The protein is an important glycoprotein hormone heterodimer, along with luteinising hormone (EM), follicle stimulating branches is along with luteinising hormone (EM), follicle stimulating branches global subunits. The proteins are useful for generating antibodies specifically humane (EM), which all have lefentical alpha subunits but differing beta subunits. The proteins are useful for generating antibodies specifically forms of the hormones, in the treatment of infertility, as identification techniques, and in other therapeutic methods associated with he native hormones. The single chain proteins are folling the presence of antibodies with respect to the native proteins in the blobgical samples, as control reagents in assay kits for assessing the levels of these hormones in various samples, and in detecting and purifying receptors to which the native hormones build the single chain forms of the heterodimers are made of the single chain forms of the heterodimers and of consideration of collowing advantages over their dimeric forms they are more stable, consoliant production are reduced since only a single gene is needed to transcribe, translate and process, provide an alternate form thus permittes fine tuning of activity levels and of in vivo half lives. Single chain forms are unique starting materials for identifying the subunits permits the protein. One engineered without disturbing the coverall foliang of the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; single chain gonadotropin analog; anti-infertility; drug; peptide therapy; intentainsing hormone; IH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoproten; infertility; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human chorionic gonadotropin beta-subunit fragment (1-114 amino acids).
                                              New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPR 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
81.58; Score 633; DB 22; Length 114;
Bost Local Similarity 100.04; Fred. No. 3.78-50;
Matches 114; Conservative. 0; Mismatches 0; Indels (
                                                                                                                                                                                                                           Example 19; Column 34; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAE04492 standard; Protein; 114 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0918288.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 114 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US6238890-B1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-MAY-2001.
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AAE04492
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creeptors to which the native hormones bind. The single chain hormones are also used in affinity chromatographic preparation of receptors or authormone antibodies. They are used as purification tools for all antibodies. They are used as purification tools for all all and to monitor to shadton of subsequent preparations of these antertals and to monitor of stoopcreates are used to generate antibodies specifically immunoreactive start these new compounds, as substitutes for the heterodiaeric forms of hormones. The present sequence is human single chain gonadotroph and on the present sequence is human single chain gonadotroph appretain consisting of human choicing demonstrating compounds, as a substitutes for the heterodiaeric forms of consisting of human single chain gonadotroph alpha-submit (1-114 anino acids) fused to human single chain gonadotroph alpha-submit astacting compound for templete directed vaccines for use in humans. Concept development of hormone-specific vaccines for use in humans. Conceptor hormone-specific vaccines for use in humans. Conceptor the present sequence is not shown in the specification, but is as SEQ ID NO: 6, in figure 6 of the specification (AAEO4475).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; chorionic gonadotropin; hCG; glycoprotein hormone; infertility; lucenising hormone; HH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRGSGSGS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 81.6; Score 634; DB 22; Length 234; DB est Local Similarity 93.35; Pred. No. 6.2e-80; Metches 16; Conservative 0; Mismatches 8; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human chorionic gonadotropin (hCG) beta, amino acids 1-114.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAU04620 standard; protein; 114 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97US-0918288.
94US-0199382.
94US-0310590.
94US-0316580.
94US-0334628.
94US-0351591.
95US-0475049.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UNIW ) UNIV WASHINGTON.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 234 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-AUG-1997;
18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-DEC-1994;
09-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUN-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 153
AAU04620
AC AAU0462
AC AAU0462
AC 23-0CT-
AC B Human;
AC Human;
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0; Gaps

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This sequence is a fusion protein of hcc/HTSH and Jun. The invention relates to a method of forming a cysteine knote protein (1) hating alpha clears to a method of forming a cysteine knote protein (1) hating alpha and beta-subunits comprising attaching a dimerisation domain (0D) to either the N-termina of both subunits or the N-termina of the channel of the beta-subunit and dimerising the products to form a heterodiment protein analog (11). The method is the products to form a heterodiment protein analog (11). The method is the dipolar products analogo (11). The method is dipolar by products (10) and products that reading inferrility of where caused by polycystic ovarian disease (associated with accessive levels of intelliating hormone). Products that readin DP's are also useful can immunogens or antigens (since a DD within may be removed later) canino acid sequences). Attendent of a DD (within may be removed later) canino acid sequences). Attendent of a DD (within may be removed later) can include thus receptor-binding and immunogenic properties) to native dimers, or and allows the combination of subunits that would otherwise combine portion and induction of subunits that would otherwise combine producting and induction of a disconding part of a glycoprotein hormone may contained to the production of subunits have longer circulation times in
                                                                                                                                                                                                                                                                                                                                                                                                                                Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81.2%; Score 631; DB 20; Length 212;
85.7%; Pred. No. 1.1e-49;
Live 2; Mismatches 18; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HCG/HTSH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 4; Fig 17; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                              99WO-US08018
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Best Local Similarity 85.78
Matches 120; Conservative
                                                                                                                                                                                                                                                                                       (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-620431/53.
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                            Homo sapiens.
Synthetic.
                                                                                               W09953065-A1.
                                                                                                                                                                                           13-APR-1999;
                                                                                                                                                                                                                                           14-APR-1998;
                                                                                                                                           21-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to human single chain forms of the glycoprotein charmone quartet which is an agonist or antagonist of intelainising hormone conformed quartet which is an agonist or antagonist of intelainising hormone (TH), follicle stimulating hormone (FSH), thyroid stimulating hormone (TSH), thyroid stimulating hormone (TSH), thyroid stimulating hormone (TSH) and the same are heterodimers having identical alpha subunits and differing beta subunits are head of single chain hormones are used in treating infertulity, as olds in vitro fertulisation techniques, and other therapeutic methods associated with the native hormones are useful as reagents in a manner similar to heterodimers, as diagnostic cold to control reagents in assay kits for assessing the saredgents in amanner similar to heterodimers, and diagnostic tools to control reagents in assay kits for assessing the lovels of them hormones are also used in affiliar, chromatographic preparation of receptors or attibutions and in affiliar, chromatographic preparation of receptors or antibution of subsequent preparations of these materials and common or isolation of subsequent preparations of these materials and common of subsequence administered as a trugs. The single chain of subsequence is human chorionic gonadotropin beta with the present sequence is human chorionic gonadotropin beta constructing single chain gonadotropin manalogs related to the invention. Analog single chain gonadotropin manalogs related to the invention. Analog vectine design and for the development of hormone-specific vaccines for the unamplate directed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cysteine knot protein; protein formation; heterodimeric protein analog; deglycostylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                    New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization bechiques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
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81.5%; Score 633; DB 22; Length 114;
Best Local Similarity 100.0%; Pred. Mo. 3.7-5.6;
Matches 114; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HCG/hTSH beta subunit-Jun fusion protein sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 19; Column 33; 87pp; English.
94US-0310590.
94US-0334628.
94US-0351591.
95US-0475049.
97US-0853524.
                                                                                                                                           (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                           WPI; 2001-366474/38.
                                                                                                                                                                                              Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 114 AA;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
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This sequence is a fusion protein of HCG/HTSH and Jun. The invention relates to a method of forming a cystein knot protein (i) having alpha and beta-subunits comprising attaching a dimerisation domain (UD) to either the N-terminal of both subunits or the N-terminal of the Deta-subunit and the subunit and to the C-terminus of the beta-subunit and dimerising the products to form a heterodimeric protein and lamerising to produce analogues (asponists or a stage). The method is used to produce analogues (asponists or antagonists) of deglycosylated glycoprotein hormones, potentially useful, e.g. for treating infertility where caused by polygystic ovarian disease (associated with excessive the satisful profuncially useful, e.g. for treating infertility as immunogens or antigens (since a Do may containing highly antigenic anino acid sequences). Attachment of a DD quintaining highly antigenic and indivast her formation of sherocidimers, that have similar structures and allows the combination of subunits; that would otherwise combines of subunits that would otherwise compline and and and attachment of a dyopoprotein hormone may be modified without loss of activity, and attachment of the DD reduces by conty, or not at all: The N-terminal part of a glycoprotein hormone may be modified without loss of activity, and attachment of the DD reduces by vivo than individual subunits.
                                                               Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic overlan disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
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119 SKEPLAPROKERIAATLAVEKEGCOVCITVATTICAGYCPPATRULGOVLAALOOVUCNYR 188
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81.2%; Score 631; DB 20; Length 273;
Best Local Similarity 85.7%; Pred. No. 1.4e-49;
Matches 120; Conservative 2; Mismatches 18; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
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HCG/HTSH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15172 standard; Protein; 116 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 6; Fig 19; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                WO9953065-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                               21-0CT-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This sequence is a fusion protein of hGC/HTSH and Jun. The Invention relates to a method of forming a cysteine knot protein (1) having alpha calculates to a method of forming a cysteine knot protein (1) having alpha can beta-subunits comprising attaching a dimerisation domain (Db) to either the Witermini of both subunits or the Witerminios of the catherine of the channel of both subunits or the Witerminios of the catherine of the caused to produce analogues (sqonies or antagoniss) of deglicosylated of there caused by polycystic ovarian disease (associated with excessive lawning to properties). Froducts that retain Do's are also useful as immunogens or antigens (since a Do may contraining highly antigenic cannon acid asquences). Attachment of a DD (Which may be removed later) facilitates the formation of heterodimers, that have similar structures and allows the combination of subunities that would otherwise combine of subunities that would otherwise.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
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119 SKEPLRRPSR HAILANDERSGCVCITVATTICAGYCPPATRVLGGVLPALPQVVCNYR 188 
129 SKEPLRRPSR HAILANDERSGCVCITVATTICAGYCPPATRVLGGVLPALPGVVVNYR 188 
188 SKEPLRRPSR HAILANDERSGCVCITVATTICAGYCPPATRVLGGVLPALPGVVVNYR 188 SKEPLRRPSR SKAFTANDERSGCVCITVATTICAGYCPPATRVLGGVLPALPGVVVNYR 188 SKEPLRRPSR SKAFTANDERSGCVCITVATTICAGYCPPATRVLGGVVLPALPGVVVNYR 188 SKEPLRRPSR SKAFTANDERSGCVCITVATTICAGYCPPATRVLGGVVLPALPGVVVNYR 188 SKEPLRPSR SKAFTANDERSGCVCITVATTICAGYCPPATRVLGGVVVNYR 188 SKEPLRPSR SKAFTANDERSGCVCITVATTICAGYCPPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCPATRVLGGVVCTPATRVLGGVVC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          189 DVRFESIRLPGCPRGVPPVVSYAVALSCQCALCNTDYSDCIHEAIKTNYCTKPQKSYSSS 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
deglycosylated glycoprotein hormone: infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therepy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Watch 81.2%; Score 631; DB 20; Length 273; Best Local Similarity 85.7%; Pred. No. 1.14-9.4; Matches 170; Conservative 2; Mismatches 18; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 6; Fig 18; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        249 SKAPPPSLPSPSRLPGPSDT 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0059625.
                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        273 AA;
                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                  13-APR-1999;
                                                                                                                                                                                                                                                    W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-APR-1998;
                                                                                                                                                                                                                                                                                                                                   21-0CT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
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The single-chain gonadotropin analogue 2a (human CG-beta(1-114) [N13X, X13X], 110XF-thuan CG-alpha[1-29][N3X, X19X], 10XD be derived from analogue 2 by removing at least one of the four glycosylation sites. The partially deglycosylated analogue has anti-luteinising hormone (lutropin) activity and can be used for facilitating ownlation, terminating pregnancy and reducing androgen secretion. The effects of analogue 2a depend upon the time it is administered; will minite fertility when given early in the menstrual cycle but will inhibit fertility when given later.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Owery Match 80.4%; Score 625; DB 16; Length 234; Best Local Similarity 92.7%; Pred. No. 4.1e-4.9; Marches 115; Conservative 0; Mismatches 9; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 SKEPLRPRCRPIXATLAVEKEGCPVCITVXTTICAGYCPTWTRVLQGVLRALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 SKEPLRPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
Region 21..134
//abel- hcc_beta_subunit_(1-114)

Misc-difference 33
//note- "vild-type Asn at position 13 of the beta-
subunit is pref. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site*
                                                                                                                                       50
/note= "wild-type Asn at position 30 of the beta-subunit is pref. replaced by another amino acid (esp. Gln) to remove a glycosylation site*
                                                                                                                                                                                                                                                                                              Misc-difference 220
/note- "wild-type Asn at position 78 of the alpha-subunit is pref. replaced by another amino acid (esp. Gln) to remove a glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating slycosprotein hormones having lutropin activity
                                                                                                                                                                                                                           Hisc-difference 70
/note - Arg corresponds to CCG codon*
Region 135..142
Region 141..234
Region 141..234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 24; Fig 7 and Page 60; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94US-0199382.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1995-302553/39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W09522340-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The sequence is an analogue of mature hCG beta subunit having residues 109 and 110 reglaced by methionine and alainine residues respectively, and residues 117-145 deleted. This introduces an additional cleavage site for CMFs, useful for determining the distulphide bonds. This can be used to show that mutagenish has not altered the "normal" disulphide pattern of analogues, and for See AAR15041, AAR15061-R15125 and AAR15161-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Single chain gonadotropin; human chorionic gonadotropin; hCG; alpha; beta; subunit; nanisoque; glycoprotedin hormone; fertility; inhibit; stimulate; increase; lutropin; luteinising hormone; LH; follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                    Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Partially deglycosylated single chain gonadotropin analogue 2a.
                                                                                                                                                                                                                                                                                                                                                                                                                   New qlyco-protein hormone analogues - for inducing fertility (
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81.0%; Score 629; DB 12; Length 116; 98.3%; Pred. No. 8.7e-50; tive 0; Mismatches 2; Indels (
                                                                   hCG methionine substitution mutant, G4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR86260 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
1..20
/label- leader
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                                                             91WO-US03162.
                                                                                                                                                                                                                                                                                90US-0520703.
                                                                                                                                                                                                                                                                                                            (UYNE-) UNIV MED NEW JERSEY.
                                11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 98.3%
Matches 114; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-MAY-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 116 AA;
                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                             07-MAY-1991;
                                                                                                                                                                                                                                                                              08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                               Campbell RK,
                                                                                                                                                                          WO9116922-A.
                                                                                                                                                                                                          14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR86260;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Key
Peptide
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Human; single chain gonadotropin analog no:2b; anti-infertility; drug;
peptide therapy; lutefalsing hormone; Lif follicle stimulating hormone;
FSH; thyroid simulating hormone; TSH; chorionic gonadotropin; CG;
glycoprotein; infertility; fusion protein; mutant; mutein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "Wild type Asm substituted with Xaa, Where Xaa refers to Glm or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "Corresponds to 1-114 amino acids of human chorionic gonadotropin (CG) beta-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note- "Wild type Asn substituted with Xea, refers to Gln or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note- "Wild type Asn substituted with Xaa, refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human single chain gonadotropin analog no:2b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
21..134
                                                                                                                                                                                                                                                                                            AAE04519 standard; Protein; 234 AA.
                                                                                                             122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                     141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94US-0199382.
94US-0289396.
94US-0310590.
94US-034628.
94US-0351591.
95US-0475049.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-0918288.
                                                                                                                                                                                                                                                                                                                                                                                                04-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US6238890-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-MAY-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-FEB-1994
12-AUG-1994
                                                                                                                                                                                                                                                                                                                                                AAE04519;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Region
                                                   요
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to the production of analogues of a heterodimeric subunit glycoporotein hormone (GPH) a.9. Annam chorionic gonadotropin (button) that ground trefails and trefails and promone (HPH), human follicle stimulating hormone (HPH), human follicle stimulating hormone (HPH), and finctional mutefuls, which are modified to contain an intersubunit disalphide bond, between an alpha subunit cysteine and a beta subunit cysteine, for the corresponding native GH receptor. This sequence blocktivity for the corresponding native GH receptor. This sequence correctivity for the corresponding native GH receptor. This sequence of the hormone hornor and the subunit in which amino acid residues 55-103 of the hEHI-bet subunit replace anno acid residues of the hormone subunit and the sequence of the hormone of the subunit in which amino acid residues of the corresponding analogues are designed specifically to reduce perturbation of the 3-dimensional structure of the hormone of modified draw will have affinity for the native receptors and have appointed early early and propose the hormone and propose the hormone and a for the native GPHs and prolong the hormone as for the native GPHs and prolong the hormone as for the native GPHs and prolong the hormones. The analogues can have uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                        pouq;
                                                                                                                                                                                                                                                                                                                                                                                            Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chorionic gonodotroplir; human lutefaising hormone; disulphide bon human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 80.21; Score 623; DB 20; Length 165; Best Local Similarity 85.04. Peret. No. 4.4e.49; Matches 119; Conservative 3; Mismatches 18; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New stabilised glycoprotein hormones · particularly hCG, hLM, h
or hTSH, have an intersubunit disulphide crosslink between the
alpha · and beta ·subunits to improve stability
                                                                                                                                                                                                                                                                                                                                         Glycoprotein hormone analogue CFC94-117-beta-R6C, Y37C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 17; Page 99; 139pp; English.
                                                                                                                              RESULT 160
AAM99528
ID AAM99528 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98WO-US13070.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-JUN-1997; 97US-0050784.
                                                                                                                                                                                                                                                                                         08-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-JUN-1998;
122 SKAP 125
                                                141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09858957-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-DEC-1998.
                                                                                                                                                                                                                                         AAW99528;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moyle WR;
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Where Xaa

Where Xaa

WPI; 2001-366474/38. Boime I, Moyle WR;

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The sequence is an analogue of mature byc beta subunit having residues 99, 113 and 115-172 replaced by the corresponding statement in the treations in the human if protein and residues 123-15 deleted. The chimeric hormone may be useful in the treatment of infertility fin end and women and the promotion of fertility in male and female
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 DVRFESIRLPGCPRGVRDVVSYAVALSCQCALCRRSTTSCGGPKDHPLTCDDHR 114
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                                                                                                                                                                                                                                                                                                                                                                                                                                 New glyco-protein hormone analogues - for inducing fertility a
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                79.5%; Score 618; DB 12; Length 122; 98.2%; Pred. No. 9.1e-49; 1.ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
thyroid stimulating hormone; TSH: CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 in men and women and the promotor. --- animals. See AAR15043, AAR15061-R15125 and AAR15161-R15198.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90US-0520703.
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                                                                                          91WO-US03162.
                                                                                                                                                          90US-0520703.
                                                                                                                                                                                                                              (UYNE-) UNIV MED NEW JERSEY.
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Best Local Similarity 98.2
Matches 112; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hCG/hTSH chimera, C8.
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                                                                                                                                                                                                                                                                                                                                                                      WPI; 1991-353528/48.
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                                                                                               07-MAY-1991;
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                                                                                                                                                          08-MAY-1990;
                                                                                                                                                                                                                                                                                                  Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09116922-A.
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AAR15095
AAR15095
AAR15095
AAR15095
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                                                                                                                                                                                                       The Invention relates to human single chain forms of the glycoprotein corresponding equartet which is an agenist or antegonist of intensiving hormone component quartet which is an agenist or antegonist of intensiving hormone (15), follicle stimulating hormone (15), forms of single chain hormones are used in trengentic methods in vitro fertilisation techniques, and other therapeutic methods in vitro fertilisation techniques, and other therapeutic methods of sasociated with the native hormones, are single chain hormones are saging as reagents in a manner similar to heterodiners, as diagnostic tools to detect the presence of antihodies with respect to the native proteins in biological samples, as control reagents in assay kits for assessing the biological samples, as control reagents in detecting and purifying receptors to which the native hormones alministration costs for an antihodies. They are used as purification costs for an antihodies. They are used as purification costs for an antihodies. They are used as purification costs for an antihodies. They are used as purification costs for a subsequent preparation of treeptors of subsequent preparations of these man compounds, as substitutes for the heterodimeric forms of hormones. The present sequence is human single chain gonadorizopin consisting of human chortonic gonadorizopin (G) beta subunit (1-11 annihom acids) by a linker sequence. This analog serves as a useful carbon consisting of human single chain gonadorizopin and for the development of hormone-specific vaccines for use in humans.

(1-2) aniho acids) by a linker sequence. This analog serves as a useful carbon the human single chain gonadorizopin analog no: 2 shown as the human single chain gonadorizopin analog no: 2 shown and a single chain gonadorizopin analog no: 2 shown and a single chain gonadorizopin analog no: 2 shown and a 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                      New DNA or RNA encoding single chain protein useful in treating tinefallity, as aids in vitro fertilization techniques, or other inferepteutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glycoprotein hormone; immuno-castration;
Immuno-contragestive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH: GG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79.9%; Score 621; DB 22; Length 234; 91.9%; Pred. No. 9.4e-49; Live 0; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR15119 standard; Protein; 122 AA.
                                                                                                                                                          Claim 9; Column -; 87pp; English.
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Best Local Similarity 91.99
Matches 114; Conservative
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AAR15119
ID AAR1511
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/note* "wild-type Pro at position 78 of the beta-
subunit can be replaced by another amino acid
to agree with the glycosylation site motif'
                         Single chain gonadotropin analogue 2b with extra glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            foote- "wild-type Asn at position 52 of the alpha-
subunit is pref. replaced by another amino
acid (esp. Gln) to remove a glycosylation
site."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note. 'wild-type Asn at position 13 of the beta-
subunit is pref. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference 50
/note- "wild-type Asn at position 30 of the beta-subunit is pref. replaced by another amino acid (esp. Gln) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "wild-type Asn at position 78 of the alphasubunit is pref. replaced by another amino acid (esp. Gin) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Misc-difference 99
/note= "wild-type Val at position 79 of the beta-subunit is replaced by Thr to agree with the glycosylation site motif*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Single chain gonadotropin; human chorionic gonadotropin; hCG; pipha; beta; subunit; analogue; glycoprotein hormone; fertility; tahibit; stimulate; increase; lutropin; luteinising hormone; LB; folilole stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                        Region 135...142 une giycosylation site motif"
/label-linker
Region /label-Gonadotropin_alpha_subunit_(1-92)
Misc-difference 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Misc-difference 70 /note- "Arg corresponds to CCG codon" Misc-difference 98
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7.1abel - leader
21..134
7.label - hCG_beta_subunit_(1-114)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference
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                                                                                                                                                                                                                                                                                                                                                 AAR86270;
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Peptide
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MARSO
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                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence is an analogue of mature hCG beta subunit having residues 112-145 deleted. It was prepd. using PCR mutagenesis to insert a stop codon into the gene. It may be useful as an agonist can supression of gondal activity during chemotherapy.
                                                                                                                    The sequence is an analogue of mature hCG beta subunit having residues 112, 113, and 115-114 replaced by the corresponding residues in the hTSR protein and residues 125-145 deleted. The chimeric hormone may be useful as a TSH antagonist for the treatment of hyperthyroidism.
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immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
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immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                              Query Match 79.54; Score 618; DB 12; Length 124; Best Local Similarity 98.24; Pred. No. 9.3e-9; Marches 112; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 164
AAR15161
LID AAR15161 standard; Protein; 111 AA.
XX
                                                                          Table III; Page 62; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hCG deletion mutant, Fl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
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                                                                                                                                                                                                                                                                                             Sequence 124 AA;
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The sequence is an analogue of mature hFSH beta subunit having several residues replaced by the corresponding residues in the hCG protein. The chimert bornone is capable of directing bornone blinding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15041, AAR15061-R13125 and AAR15161-R13192)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence is an analogue of mature hCG beta subunit having residues 105-107, 100, 113, 115-117, and 119-122 replaced by the residues 105-107, 100, 113, 115-117, and 119-122 replaced by the responding residues in the bowine LH protein and residues 123-142 deleted. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunosen, agoinst and/or antagonist. See AARISO41, ARRISO61-R15125 and AARISO61-R15139.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
    New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agants, for suppressing reproductive system 
development and as immuno-contragestive waccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 77.21; Score 600; DB 12; Length 115; Best Local Similarity 98.24; Pred. No. 3.74-71; Marches 199; Conservative 1; Mismatches 1; Indels watches 199; Conservative 1. Mismatches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
litefulsising hormone; LH; OG; bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR15108 standard; Protein; 122 AA.
                                                                                                                                       Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Table IV; Page 63; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hCG/bLH chimera, D12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 115 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-NOV-1991.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR15108
1D AAR15108
1X AAR15108
XX AAR1510
XY 11-FEB
XX B B HCG/DLB
XX IMMUNO
XX HUMONO
XX HOMO 8B
XX HOWO
XX HOMO 8B
XX HOMO 8B
XX HOWO
XX HOMO 8B

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 DVRFESIALPGCPRGVNPVVSYAVALSCOCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The single-chain gonadotropin analogue 2b (human CG-beta(1-114) (N13X,N30X,P3X,N78Y) Linker-human CG-alpha(1-92)(N3X,N8X)) is an example of a chimeric glycopeptide hormone having an extra glycosylation site. Addition of oligosaccharides has a positive effect on stability of hormones in circulation and can be used to prevent unvanted antibody or receptor interactions. The present analogue has anti-intelnishing hormone (lutropin) activity and can be used for facilitating owniation, terminating pregnancy and reducing androgen secretion.
                                                                                                                                                                                                                                                                                                              of
                                                                                                                                                                                                                                                                Methods for altering fertility in mammais, esp. humans · e.g. stimulating fertility by reducing the activity and/or levels circulating sixonspotean hormones having lutropia activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match 78.8; Score 612; DB 16; Length 234; Best Local Similarity 91.18; Pred: No. 6.24-84 Matches 113; Conservative 0; Mismatches 11; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vaccine; hund; chorionic gonadotropin;
folifole stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                        Example 25; Fig 7 and Page 60; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15087 standard; Protein; 115 AA.
18-FEB-1994; 94US-0199382.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hCG/hFSH chimera, B27.
                                                                                                                                                                                                 WPI; 1995-302553/39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1991-353528/48.
                                                               (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09116922-A.
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                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15087;
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AAR15087
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The sequence is an analogue of mature hCG beta subunit comprising residues 1-115 of hCG beta having residues 10-104, and 112-115 replaced by the corresponding residues in the hESH protein. The chimeric hormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AARISO43, AARISO61-R15125 and AARIS161-R15198).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Opery Match 75.4%; Score 586; DB 12; Length 115; Best Local SImilarity 96.4%; Pred. No. 6.9e-46; Marches 107; Conservative 1; Mismatches 3; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
             New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                             Glycoprotein hormone; fertility; Immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
follicie stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCD 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGTVRCHPLTCD 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAU04609 standard; Protein; 234 AA.
                                                                                                              AAR15081 standard; Protein; 115 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Table II; Page 61; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                              (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                   90US-0520703.
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                                                                                                                                                                      11-FEB-1992 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                  hcg/hrSH chimera, B21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 115 AA;
                                                                                                                                                                                                                                                                                                                                                                      07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                 08-MAY-1990;
                                                                                                                                                                                                                                                                                    Homo saptens.
                                                                                                                                                                                                                                                                                                                                            14-NOV-1991.
                                                                                                                                                                                                                                                                                                               WO9116922-A.
                                                                                                                                           AAR15081;
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AAU04609
ID AAU0460
XX
AC AAU0460
XXX
DT 23-OCT-
XX
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                                                                                                                                                    The sequence is an analogue of mature hCG beta subunit having residues 77, 82, 83, 89, 92, 93, 99, 113 and 115.12z replaced by the corresponding residues in the human LH protein and residues 133-145 deleted. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6; Indels 9; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5; Indels 0; Gaps
                                                                                               2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTHTRVLQGVLPALPQVVCNYR 61
                                        Queiy Match 76.1%; Score 591.5; DB 12; Length 122; Best Local Similarity 87.3%; Pered. No. 2.3e-46; Metches 112; Conservative 1; Mismatches 6; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing fertility :
Immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                            Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH; GG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match

75.64; Score 589; DB 12; Length 122;
Best Local Similarity 93.04; Pred. No. 3.96-46;
Matches 106; Conservative 3; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             See AAR15043, AAR15061-R15125 and AAR15161-R15198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                  RESULT 168
AAR15123
ID AAR15123 standard; Protein; 122 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991; 91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                   11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                 hCG/hLH chimera, A8.
             Sequence 122 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 122 AA;
                                                                                                                                                                                                              122 SKAPPPSL 129
                                                                                                                                                                                                                                       115 --- PLPSI 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                        AAR15123;
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The invention relates to human single chain forms of the glycoprotein hormone quarter which is an agonist or antegonist of intentialing hormone (LH), follicle stimulating hormone (TSH), thyroid stimulating hormone (TSH) or chorionic gonadotropin (CG). All these hormones are heterodimers having identical alpha subunits and differing beta subunits. The agonist forms of single chain hormones are used in treating infertility, as aids in vitro fertilisation techniques, and other therapeutic methods associated with the native hormones. The single chain hormones are useful as reagents in a manner similar to heterodimers, as diagnostic tools to
                                                                                                                                                                                                                                                                                                                               Human; single chain gonadotropin analog no:8; anti-infertility; drug; peptide therapy; luterialising hormone; H; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="Linker peptide"
143...234
/note="Corresponds to 1-92 amino acids of human single
chain gonadotropin alpha-subunit"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note- "Corresponds to 95-103 amino acids of human follicle stimulating hormone (FSH) beta-subunit"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "Corresponds to 1-100 amino acids of human chorionic gonadotropin (CG) beta-subunit" 121-1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                    Human single chain gonadotropin analog no:8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "DDPR peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
21..120
                                                                                                                                           AAE04481 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 9; Fig 12; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       940S-0199382.
940S-0289396.
940S-0310590.
940S-0334628.
940S-0151591.
950S-0475049.
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                                                                                                                                                                                                                                        (first entry)
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135..142
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-366474/38.
N-PSDB; AAD08799.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Boime I, Moylé WR;
         ||
|141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-AUG-1997;
                                                                                                                                                                                                                                        04-SEP-2001
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                                                                                                                                                                                             AAE04481;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Key
Region
                                                                                         RESULT 171

ARBO4481

AX AARD4481

XX AARD4481

XX ARBO4481

XX Human | SEH; the Peptide RW Peptide RW Peptide RW Pell; the Pe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequence represents the amino acid sequence of single chain gondedtropin analogue 18. The giveprotein homomone and contained to the heterodiment of the homomone, the treatment of infertility, as an aid for in vivo fertilisation techniques, and in other therapeutic methods associated with the native hormone. The single chain protein is further useful as a reagent in a manner similar to the heterodimen, as a disquostic tool to detect the control of any presence of antibodies with respect to the native proteins in the bound of any presence of antibodies with respect to the native proteins in the control of any as a control reagent in assay fits for assessing the presence of antibodies with respect to the native proteins in the lowels of these hormones in various samples, and in detecting and protein of forms of the heterodimers have the following advantages over their dimeric forms: they are more stable, problems of recombinant production are reduced since only a single gene is needed to transcribe, ctuanslate and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives. Single chain forms care unique starting materials for identifying truncated forms with the catculty of the dimer. The linkaga between the subunits permits the protein to be engineered without disturbing the overall foliding of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                              Human; glycoprotein hormone; infertility; in vivo fertilisation; single chain gonadotropin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 74.99; Score 552; DB 22; Length 234; Best Local Similarity 88.74; Pred. No. 3.3e-62; Matches 110; Conservative 0; Mismatches 14; Indels Matches 100; Conservative 0; Mismatches 14; Indels
Single chain gonadotropin analogue #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 12; Fig 12; 86pp; English.
                                                                                                                                                                                                                                                                                                9705-0918288.
9405-0199382.
9405-0289396.
9405-0334628.
9405-0351991.
9505-0475049.
                                                                                                                                                                                                                                                              99US-0282357.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-424301/45.
N-PSDB; AAS08499.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 234 AA;
                                                                                                                  Homo sapiens.
                                                                                                                                                              US6242580-B1.
                                                                                                                                                                                                                                                           31-MAR-1999;
                                                                                                                                                                                                                                                                                                   25-AUG-1997;
18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-DEC-1994;
07-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 SKAP 125
                                                                                                                                                                                                            05-JUN-2001.
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0; Gaps

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The sequence is an analogue of mature hCG beta subunit comprising residues 11:15 of hCG beta having residues 105-107, 109, 110 and 112-115 replaced by the corresponding residues in the hFSH protein. The chimeric hormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (see AARISO43, AARISO61-RIS125 and AARIS161-RIS198).
                                                                                                                                                                                                                                                                                                                                                             2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Single chain gonadotropin; human chorionic gonadotropin; hCG;
piphs; beta; subunit; analogue; glycoprotein hormone; fertility;
inhibit; stimulate; increase; lutropin; luteinising hormone; LH;
follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /label- hFSH_beta_subunit_(95-103)
/note- 'immediately followed by a Cys residue
/note- 'immediately followed by a Cys residue
131..134 (hFSH beta subunit amino acid 104)*
/label- DDPR
135..142
/label- Hinker
143..334
/label- Gonadotropin_alpha_subunit_(1-92)
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 73.74; Score 573; DB 12; Length 115; Best Local Similarity 95.51; Pred. No. 16-44; Matches 106; Conservative 1; Mismartches 4; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "Arg corresponds to CCG codon" 121..129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1..20
/label- leader
21..120
/label- hCG_beta_subunit_(1-100)
70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Single chain gonadotropin analogue 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR86254 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95WO-US02067.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1995-302553/39.
N-PSDB; AAT03233.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SENS-) SENSI-TEST.
                                                                                                                                                                                                           Sequence 115 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W09522340-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR86254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cc detect the presence of antibodies with respect to the native proteins in biological samples, as control respects in assay kits for assessing the certal of these hormones in various samples, in detecting and purifying receptors to which the native hormones bind. The single chain hormones cc antibormone antibodies. They are used superlication tools for isolation of subsequent preparations of these materials and to monitor continuous faingle chain hormones administered as drugs. The single chain of subsequent preparations of these materials and to monitor continuous. The present sequence is the man single chain gondoricative with these new compounds, as substitutes for the heterodiancic forms of proporteins are used to generate antibodies specifically immunorsactive with these new compounds, as substitutes for the heterodiancic forms of consisting ones related to the invention, analog no.8 related to the invention, analog no.8 is a fission protein catals, follicia simulating bormone (FSB) beta-subunit (1.90 maino acids) and DDPR peptide fused to human single chain gonadotropin alpha subilit (1.92 maino acids) by a linker sequence. This analog serves as a cuts) as definited the contained for template directed vaccine design and for the development of hormone-specific vaccines for use in humans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCTVRGLGPSYCDDPRGSGSGS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 SKEPLRPRCRINATLAVEKEGCPVCITVNTTICAGTCPTMTRVLQGVLPALPQVVCNTR 61
11 SKELRPRCRINATLAVEKEGCPVCITVNTTICAGTCPTMTRVLQGVLPALPQVVCNTR 80
21 SKEPLRPRCRINATLAVEKGCPVCITVNTTICAGTCPTMTRVLQGVLPALPQVVCNTR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New glyco-protein hormone analogues - for inducing fertility as 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 74.9%; Score 592; DB 22; Length 234; Bett Local Similarity 88.7%; Pred. No. 3.38-45; Matches 110; Conservative 0; Mismatches 14; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
folilicis stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 172
AAR15083
ID AAR15083 standard; Protein; 115 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hCG/hFSH chimera, B23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-NOV-1991.
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The sequence is that of a modified form of human chorionic gonadotrophin (MCG), analogue "0", in which anno acids in the "D" and/or "G" regions have been subtituted resulting in changes in the binding specificity and avidity of luteinising hormone (HA) and follicle stimulating hormone (HA) and follicle stimulating beta-heterodimeric polypeptide having an affinity to vertebrate LH and FSH receptors. Such an analogue can be prepared having a desired ratio of FSH:LH activity. The polypeptide may be used for treating human infertility or polycystic ovarian disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New alpha, beta-hetero:dimeric polypeptide derivs. - which bind to truchising and follicle stimulating hormone receptors, useful for controlling the ratio of FSH to LH activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HCG; human; chorionic gonadotropin; beta-subunit; heterodimer; alpha-subunit; histeropin; state receptor; HS; HSH; thyrotropin; predion; or region; protein engineering; fertility; hormone; folicie stimulating hormone; luteinising hormone; rSH; ovulation; spermatogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

17.21; Score 569; DB 14: Length 114;
Best Local Similarity 93.64; Pred. No. 2.4e-44;
Matches 103; Conservative 1; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
1.93
Anote "HCG sequence"
94.97
Anote "FSH D-region"
98.107
Anote "FSH G-region fragment"
108.109
Anote "FSH G-region fragment"
Anote "FSH G-region fragment"
Anote "FSH sequence"
                                                                                                                                                             Disclosure; Page 21; 98pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR88922 standard; protein; 114 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94US-0184408.
91US-0717151.
93US-0108845.
95US-0425673.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HCG analogue-Q beta-subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91US-0717151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-JUL-1996 (first entry)
WPI; 1993-018070/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 114 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-JAN-1994;
18-JUN-1991;
18-AUG-1993;
18-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-JUN-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR88922;
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Region
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AAR88922
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                                                                                                                                                                               Analogue 8 (hCG-beta(1-100)-hFSH-beta(95-103)-DDPR-linker-human alpha(1-92)) is a specific example of a single chain gondoctropin having a chorionic gondoctropin (CG) beta-subunit at the N-terminus and a CG alpha-subunit at the C-terminus, joined by a linker of 1-16 anino acids. The analogue has follicle stimulating homone (follitropin) and lutefnising hormone (lutropin) and lutefnising hormone (lutropin) activity but is structurally more similar to hCC then to hFSH. The analogue is useful for inducing follicle development and increasing male fertility.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hGG; glycoprotein hormone analogue; human infertility; LH; FSH; lutesinishay hormone receptor; follicle stimulating hormone receptor; vertebrate; polygystic ovarian disease.
                     Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the arterity and/or levels of circulating slycosprotein hormones having lutropin activity
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/note- non-hcd derived residues*
108.114
/note- non-hcd derived residues*
94.97
/note- D region - LH binding and specificity*
/note- G region - FSH binding and specificity*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match 73.74; Score 573; DB 16; Length 234; Best Local Similarity 87.94; Pred. No. 2.1e-44; Marches 109; Conservative 0; Mismatches 15; Indels (
                                                                                                                               Example 19 and Claim 39; Fig 13; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Modified hCG beta-subunit - analogue "Q".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR31005 standard; protein; 114 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92WO-US05207
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        141 GSAP 144
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-JUN-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR31005;
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Region
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The invention relates to human single chain forms of the glycoprotein channed quarter which is an agonist or antagonist of lutefinising hormone (CHJ), follicle stimulating hormone (FSH), thyroid stimulating hormone (CHJ), follicle stimulating hormone (FSH), thyroid stimulating hormone (CHJ), follicle stimulating hormone (FSH), thyroid stimulating hormone (TSH) are considered that the submits and differing beta submits. The agonist for having identical alpha submits and differing beta submits. The agonist considered with the native hormones are used in treating infertility, as alds as reagents in a manner similar to heteroidmers, as diagnostic methods as reagents in a manner similar to heteroidmers, as diagnostic tools to detect the pressure of antibodies with respect to the native proteins in biological samples, as control reagents in stars kind of these hormones in various samples, in detecting and purifying receptors to which the native hormones bind; the single chain hormones and third preparation of receptors or antibodies. They are used as purification tools for antibodies than hormones and ministered as drugs. The single chain hormones and submitistered as drugs. The single chain hormones are also used in grinity chromatographic preparations of these materials and to monitor levels of studies than hormones administered as drugs. The single chain normones and submitistered as drugs. The single chain of subsequent preparations of these materials and to monitor levels of human compounds, as substitutes for the heteroidneric forms of the hormones. The present sequence is human single chain gonadorropin and of seconds of the complex of hormones specific vaccines for use in humans.

C submit (1-92 amino acids) by a linker sequence. This analog serves as a useful starting compound to hormone-specific vaccines for use in humans.

C submit (1-92 amino acids) by a linker sequence this analog serves as a useful starting compound single to hormone specification (AREA0481).
                                         131.134 (Anote "DDR peptide" 135..142 (Anote "Linker peptide" 143..24 (Anote "Corresponds to 1-92 amino acids of human single chain gonadotropin alpha-subunit" 1914
                                                                                                                                                                                                                                                                                                                                                                       Misc-difference 179.

Misc-difference 720

Misc-difference force with type As nubstituted with Xaa, Where Xaa Misc-difference 720

Conce- "Wild type As nubstituted with Xaa, Where Xaa refers to Glo or other amino acid"
// note= "Corresponds to 95-103 amino acids of human follicle stimulating hormone (FSH) beta-subunit" 131...134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 9; Column -; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94US-0199382.
94US-0289396.
94US-0310590.
94US-0351591.
95US-0475049.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US6238890-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1994;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-MAY-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The sequence is an example of a glycoprotein hormone beta-chain

that analogue used to construct an alpha, beta wheterodimer polypeptide

with altered binding affinity to LH receptor and FSH receptor. The

theterodimer preferably contains an HGC alpha-submit and a chimaeric

beta-subunit contains HGC, LH, FSH and/or thypotropin residues.

Ending activity and specificity may be altered without disrupting

the terodimer formation or reaction with antibodies. The Dresgion of

HGC is most important for FSH subunit and the Greedinn is

the most important for FSH binding, and the Greegion of

and G of Ismostrat for FSH binding, Analogue-G, with an FSH preceptor

and G millial receptor. A cDMA for analogue-G may be expressed in a

C COS-7 cell culture. This type of hormone analogue may be useful

C diseas, or to induction of ovulation in women with polycystic ovary

some circulating like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; single chain gonadotropin anglog no:8a; anti-infertility; drug; peptide therapy; lutefailsing hormone; Lif follicle stimulating hormone; PSB; thyroid stimulating hormone; TSB; chorionic gonadotropin; CG; dlycoprotein; infertility; fusion protein; mutant; mutein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     //oote= "Wild type Asm substituted with Xaa, Where Xaa refers to Gin or other amino acid" //oote= "Wild type Asm substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                      New alpha, beta-hetero:dimeric glyco:protein hormone polypeptide(s) - having a non-aturally occurring beta-subunit derived from hGG, LEI, FSH and TSH at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
31...20
70...20
70...20
reponds to 1.100 amino acids of human chorionic gonadotropin (CG) beta-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ery Match 73.2%; Score 569; DB 17; Length 114; St Local Similarity 93.6%; Pred No. 2.4e-44. titches 163; Conservative 1; Mismatches 6; Indels (tches 103; Conservative 1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTC 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 DVRFESIRLPGCPRGVNPVVSTAVALSCQCALCDSDSTDCGGRKDHPSYC 110
                                                                                                                                     Moyle WR, Wang Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human single chain gonadotropin analog no:8a.
                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Column 11-12; 27pp; English.
                                                                                                                                 Campbell RK, Han Y, Macdonald GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 176
AAE04515
ID AAE04515 standard; Protein; 234 AA.
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                                                                (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                      WPI; 1996-208744/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 114 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Misc-difference
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Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S1
Matches 103:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAE04515;
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/note HcG sequence //note HcG sequence //note HcG D-region //note -/region //note -/region //note -/regiment encoded by oligonucleotide AAT12942 //note -/re
                                                                                                                                             Gaps
                                                                                                                                                                                              The sequence is an example of a glycoprotein hormone beta-chain analogoue used to construct an alpha, peta-hetrodimer polypeptide with altered binding affinity to LH receptor and FSH receptor. The heterodimer prefetchly contains an RG alpha subunit and a chimmeric beta-subunit containing HG, HH, FSH and/Or thyrotropin residues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New alpha, beta-hetero:dimeric glyco:protein hormone polypeptide(s) - having a non-naturally occurring beta-subunit derived from hCG, LH, FSH and TSH
                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        H(GC; human; chorionic gonadetrophin, betra-subunit; heterodimer; alpha-subunit; lH; receptor; FSH receptor; LH; PEH; thyrotropin; presqion; or-region; protein engineering; fertility; humane; folicle stimmlating hormone; luceinising hormone; 75H; evulation; spermatogenesis.
                                                                  Owery Watch 72.2%; Score 561; DB 14; Length 114; Best Local Similarity 92.18; Pred. No. 1.18-43; Metches 105; Conservative 0; Manches 9; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wang Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Campbell RK, Han Y, Macdonald GJ, Moyle WR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "Human FSH G-region"
110..114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Column 11-12; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note- "HCG sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR88920 standard; protein; 114 AA.
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91US-0717151.
93US-0108845.
95US-0425673.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HCG analogue-G beta-subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91US-0717151.
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             Sequence 114 AA;
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18-JUN-1991;
18-AUG-1993;
18-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR88920;
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Region
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                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hGG; glycoprotein hormone analogue; human infertility; LH; FSH;
luteinising hormone receptor; follicle stimulating hormone receptor;
vertebrate; polycystic ovarian disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New alpha, beta-hetero:dimeric polypeptide derivs. - which bind to luttefisting and follicle stimulating hormone receptors, useful for controlling the ratio of FSH to LH activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73.1%; Score 568; DB 22; Length 234; 87.1%; Pred. No. 6.1e-44; Live 0; Mismatches 16; Indels (
                                                                                                                                16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modified hCG beta-subunit - analogue "G".
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                                                                  Query Match 73.1
Best Local Similarity 87.1
Matches 108; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYNE-) UNIV NEW JERSEY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1993-018070/02.
Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-JUN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W09222568-A.
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Region
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The single-chain gonadotropin analogue [8a (hCC-beta(1-100)[NIJX,N30X]-hFSH-beta(55-103)-DDPR-linker-chaman CC-alpha(1-2)(NISX,NDSX)] can be derived from analogue 8 by removing at least one of the glycosylation sites. The partially deglycosylated analogue has antifolicle stimulating hormone (follicle and and analogue has antihomnone (lutropin) activity and is useful for treating ovarian hyperstimulation and reducing spermatogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "wild-type Asn at position 78 of the alphasubunit is pref. replaced by another amino acid (esp. Gin) to remove a glycosylation site.
          "wild-type Asm at position 52 of the alphasubult is pref. replaced by another amino acid (esp. Glm) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Single chain gonadotropin; human chorlonic gonadotropin; hCG; piphz, beta; subunit; analogue; glycoprotein hormone; fertility; inhibit; stimulate; increase; lutropin; luteinising hormone; LH; follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating glyco:protein hormones having intropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71.9%; Score 559; DB 16; Length 234; 86.3%; Pred. No. 4e-43; tive 0; Mismatches 17; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 24; Fig 13 and Page 60; 102pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ź
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                                                                                                                                                                                                                                                                                                                                                                               95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                                                                                 9405-0199382.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 71.99
Best Local Similarity 86.39
Matches 107; Conservative
              /note-
                                                                                                                                               /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1995-302553/39.
                                                                                                                Misc-difference 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122 SKAP 125
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                                                                                                                                                                                                                                                                                                                                                                               17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                 18-FEB-1994;
                                                                                                                                                                                                                                                                                                                              24-AUG-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 180
AAR8624
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Binding activity and specificity may be altered without disrupting heterodiar formation or reaction with antibodies. The b-region of hete cis most important for LH receptor binding, and the G-region is most important for LH receptor binding, and the G-region is most important for LH receptor binding, and the G-region and and EMB (-region, has high affinity to both LH and FSH receptors. A CNMA for analoque-CT (AMB8034) is digested with BglII and SSI and ligated with oiloque-CT (AMB8034) is digested with BglII expected to the complexity of the color of the col
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 SKEPLRPRCRPINATLAVEKEGCPVCITVNITICAGYCPTWTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLOGVLPALPOVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "wild-type Asn at position 13 of the beta-
subunit is pref. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             % foote- "wild-type Asn at position 30 of the beta-
subunit is pref. replaced by another amino
acid (esp. Gln) to remove a glycosylation
site.
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piph; beta; subunit; analoque; gytopprotedin hormone; fertility;
inhibit; stimulate; increase; lutropin; inteinising hormone; LH;
follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCTVRGLGPSYCDDPR 114
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Partially deglycosylated single chain gonadotropin analogue 8a.
                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 73.2%: Score 561; DB 17; Length 114; Best Local Stallarity 92.18; Pred. Mo. 1.18-4.3; Matches 105; Conservative 0; Mismatches 9; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               70
/note- "Arg corresponds to CCG codon"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
1.30 leader
21..120
1..30 leader
2..130- hCG_beta_subunit_(1-100)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR86266 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                   Sequence 114 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR86266;
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Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Region
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0; Gaps

Key Peptide

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The sequence represents the amino acid sequence of single chain good acid and acid open 18. The glycoptocein homomon and sogue 18. The glycoptocein homomon and sogue 18. The glycoptocein homomon acid open acid of a sequence of the homomon acid open 18. The sequence of the homomon acid open 18. The first the treatment of infertility, as an aid for in vivo fertilisation techniques, and in other therapeutic methods associated with the native homomon. The single chain protein is further useful as a reagent in a manner similar to the heterodimer, as a diagnostic tool to detect the presence of antibodies with respect to the native proteins in the bringles of antibodies with respect to the native proteins in the close of antibodies with respect to the native proteins in the puritying receptors to which the native homomons bind. The single chain of the presence of antibodies with the native homomons bind, the single chain forms of the heterodimers or homodimers have the following advantages over thair dimeric forms: they as single each is needed to transacribe, cranalate and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives. Single chain forms are unique starting materials for identifying truncated forms with the activity of the dimer. The linkage between the subunits permits the protein to be engineered without disturbing the overall folding of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Owery Match 71.9%; Score 559; DB 22; Length 234; Best Local Similarity 81.5%; Pred. No. 44-41; Indels 0; Gaps Matches 101; Conservative 6; Mismatches 11; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 SREPLRPWCHPINAILAVEKEGCPVCITVNTTICAGYCPTMARVLQAVLPPLQVVCTTR 80
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 7; Fig 7; 86pp; English.
                                                                                                                                                                                                                                                         97US-0918288.
94US-0199382.
94US-0289396.
94US-0334628.
94US-0351591.
95US-0475049.
                                                                                                                                                                                     99US-0282357
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N-PSDB; AAS08489.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Boime I, Moyle WR;
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                                                                                                                                                                                                                                                              25 - AUG - 1997;
18 - FEB - 1994;
12 - AUG - 1994;
22 - SEP - 1994;
04 - NOV - 1994;
07 - DEC - 1994;
07 - UW - 1995;
09 - MAY - 1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122 SKAP 125
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                                                                                                                                                                               31-MAR-1999;
                                                                                                05-JUN-2001.
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AAE04476
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Analogue 3 (human LH-beta(1-114)-linker-human-alpha(1-92)) is a specific example of a single chain gondotroph; chimeric proteins having a cholronic gonadotropin (GC) beta-subunit at the N-terminus and a CG alpha-subunit at the C-terminus, joined by a linker of 1-16 (autho ocids are claimed. The analogue has luteinising hormone (Lutrophn) activity and is useful for inducing ovulation and increasing male fertility.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 71.9%; Score 559; DB 16; Length 234; Best Local Similarity 81.5%; Pred. No. 48-43; Matches 101; Conservative 6; Mismatches 17; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1:11111 | 1111 | 11111 | 11111 | 1111 | 1111 | 111 | 111 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Methods for altering fertility in mammals, esp. humans - e.g., stimulating fertility by reducing the artility and/or levels of elcoulating slyco-protein hormones having lurropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; glycoprotein hormone; infertility; in vivo fertilisation;
single chain gonadotropin.
Location/Qualifiers
1.20
1.20
1.31
1.34 leader
135.11
135.11
135.11
143.12
143.134
143.134
/label= Linker
143.134
/label= Gonadotropin_alpha_subunit_(1-92)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU04604 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 14; Fig 8; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-FEB-1994; 94US-0199382.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-OCT-2001 (first entry)
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N-PSDB; AAT03221.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                             WO9522340-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo saptens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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Gaps

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analog no:3 related to the invention. Analog no:3 is a fusion protein consisting of human lutelnishing hormone (EH) beta-subunit (1-114 maino acids) fused to human single chain gonadotropin alpha-subunit (1-92 maino acids) by a linker sequence. This analog serves as a useful starting compound for template directed vaccine design and for the development of hormone-specific vaccines for use in humans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVYCNTR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequence is an analogue of mature hCG beta subunit having several residues replaced by the corresponding residues in the boyone LH protein and having residues 123-145 deleted. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agonist and/or antagonist.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                 Omery Match 71.94; Score 559; DB 22; Length 234; Best Local Similarity 91.54; Pred. No. 4e-43; Meaches 101; Conservative 6; Mismatches 17; Indels Matches 101; Conservative 6; Mismatches 17; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luceinising hormone; LH; CG; bovine.
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AAR15107

AAR15107

AAR15107

AAR15107

AAR15107

AAR15107:

AAR15107:

DY

11-FEB-1992 (first entry)

DE

hCG-DLH chimera, D11.

MG GlyCoprotein hormone; immuno-castratio immuno-contragestive; vaccine; human c immuno-contragestive; vaccine; v
                                                                                                                                                                                               234 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141 GSAP 144
                                                                                                                                                                                               Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="Linker peptide"
143.234
/note="Corresponds to 1-92 amino acids of human single
chain gomadotropin alpha-subunit"
                                                                                                                                                                                                             Human; single chain gonadotropin analog no:3; anti-infertility; drug; peptide therapy; luteinising hormone; IH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; slycoprotein; infertility; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "Corresponds to 1-114 amino acids of human
lucinising hormone (LH) beta-subunit"
115..142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other thrapeutic methods associated with the native hormones
                                                                                                                                                                  Human single chain gonadotropin analog no:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualiflers
21..134
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AAE04476 standard; Protein; 234
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94US-0199382.
94US-0289396.
94US-0310590.
94US-034628.
94US-0351591.
95US-0475049.
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                                                                                                            04-SEP-2001 (first entry)
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N-PSDB; AAD08789.
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                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US6238890-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAY-2001.
                                                      AAE04476;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
Region
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/ work peptide*
//note* *Linker peptide*
143..34
//note* *20xresponds to 1-92 amino acids of human single chain gonadotropin alpha-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; single chain gonadotropin analog no:8b; anti-infertility; drug; peptide therapy; lutefailaing hormone; til follicle stimulating hormone; FSH; thyroid stimulating hormone; FSH; chorlonic gonadotropin; CG; glycoprotein; infertility; fusion protein; mutant; mutelin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note- "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gla or other amino acid"
                                                                                                                                      Gaps
                                                                                                                                                                                                            68 SREPLRPWCHPINAILAVEKEGCPVCITVNTTICAGYCPTWARVLQAVLPPLPQVVCTYR 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Wild type Asn substituted with Xma, Where Xma refers to Gln or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Where Xaa
                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPIMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note- "Wild type Val substituted with Thr"
121...12
/note- "Corresponds to 95-103 amino acids of human
follicie stimulating hormone (FSH) bete-subusit"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 //note "Corresponds to 1-100 amino acids of human chorionic gonadotropin (CG) beta-subunit"
                                                                                                                                                                                                                                                                            62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
                                                                                                                                                                                                                                                                                                       ö
                                                                                           Length 181;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "Wild type Asn substituted with Xaa, refers to Gln or other amino acid" 220
                                                                                        Ouery Match 71.44; Score 555; DB 20; Length 18 Best Local Similarity 86.81; Pred. No. 7.18-43; Matches 9; Conservative 6; Mismatches 9; Indels Matches 9; Londels 19; Local Mismatches 9; 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human single chain gonadotropin analog no:8b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      *DDPR peptide"
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21..120
                                                                                                                                                                                                                                                                                                                                                                                                                                    AAE04525 standard; Protein; 234 AA.
   vivo than individual subunits.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-SEP-2001 (first entry)
                                                Sequence 181 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo saplens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAE04525;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
Region
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                                                                                                                                                                                                                                                                                                                                                                                         RESULT 185
AAE04525
ID AAE0453
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                                                                                                                                                                                                                                                                                                                   윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents a fusion_protein of the human leutenising component (hill) beta subunits and Jun. The invention relates to a method of forming a cysteine knot protein (1) having alpha and method of forming a cysteine knot protein (1) having alpha and method of forming a cysteine knot protein (1) having alpha and method of forming a cysteine knot protein diemeistand dameising the alpha subunit and component of the alpha subunit and the relation of the alpha subunit and an anioques (4) the method is used to produce a heterodimeric protein analog (11). The method is used to produce analogues (agonists or antagonists) of deglycosylated glycoprotein or promose, potentially useful, e.g. for treating infertility where caused by polycystic ovarian disease (associated with excessive levels of utenishing hormone). Products that retain DD's are also useful as immunogens or antigens (alone a DD may containing highly antigent camino acid sequences). Attachment of a DD (which may be removed later) call sequences, the combination of subunits that would otherwise combine companion of subunits that would otherwise combine and allows the combined on subunits that would otherwise combine component of the without loss of activity, and alterhand to the DD reduces to mander the companion of subunits have longer circulation times in
                                                ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                                                                                                                                Gaps
                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                6
Ouery Match 71.6%; Score 556.5; DB 12; Length 122; Best Local Similarity 83:6%; Pred. No. 35-43; Netches 10; Conservative 2; Mismatches 10; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HLH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY43279 standard; Protein; 181 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 4; Fig 17; 73pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-JAN-2000 (first entry)
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                                                                                                                                                                                                                                                                        122 SKAPPPSL 129
                                                                                                                                                                                                                                                                                                                   115 --- PLPSI 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-ocr-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY43279;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                            RESULT 184
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This sequence is a fusion protein of hid and Jun. The invention craited to a method of forming a cystelle knot protein (1) having alpha and beta-subunits comprising attaching a dimeriation domain (DD) to cether the N-termin of both subunits or the N-termins of the beta-subunit and to the C-termina of the beta-subunit and dimerising the products to form a heterodimeric protein analog (1). The method is used to produce analogues (agonists or antagonists) of deglycosylated cylopotrotein hormones, potentially useful. 69 for treating infartility where caused by polycystic ovariand disease (associated with excessive considerable by polycystic ovariand disease (associated with excessive constitution of a nitigans (since a DD may constaining highly antiganic amino acid sequences). Attachment of a DD (which may be removed later; and thus receptor-binding and immunogenic properties) to native dimers, and thus receptor-binding and immunogenic properties) to native dimers. (and thus receptor-binding and immunogenic properties) to native dimers, cond allows the combination of subunits that would other-size combine poorly, or not at all. The N-terminal part of a glycoprotein hormone may formation of homodimers. Heterodimers have land of the Draduces formation of homodimers. Heterodimers have land crucialized without loss of activity, and attachment of the Draduces in crulation times in
                                                                                                                                                                                   Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorlonic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITYNTTICAGTCPTMTRVLOGVLPALPOVVCNTR 61
129 SREPLRPRESERIALLANDERSGCCVCITYNTTICAGTCPTMARVLAVLPPLAVEPLAVERTR 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hatch 71.4%; Score 555; DB 20; Length 242; Local Ismlarity 86.8%; Pred. No. 9.5e-43; Indels 0; Gaps es 99; Conservative 6; Mismatches 9; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HLH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY43293 standard; Protein; 242 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 6; Fig 18; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0059625.
                                                                                    19-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               242 AA;
                                                                                                                                                                                                                                                                                                                            Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                         W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                   AAY43286;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Si
Matches 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 187
AAY43293
ID AAY4329
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to human single chain forms of the glycoprotein chormone quartet which is an agenist or antagenist of illucianising hormone common quartet which is an agenist or antagenist of illucian benome (TSH), follucia stimulating hormone (TSH), follucia stimulating hormone (TSH), follucia as the manner submits are used in treating infertility, as aids in vitro fartilisation techniques, and other therapeutic methods associated with the native hormones. The single chain hormones are useful as reagents in a manner similar to heteroflance, as it describes to the chain hormones are useful as requested with the native hormones the single chain hormones are useful as reagents in a manner similar to heteroflance, as disposing the cect the presence of antibodies with respect to the native proteins in closely control samples, in detecting and purifying elect the presence of antibodies in various samples, in detecting and purifying receptors to which the native hormones blud; the single chain hormones are used to a guiltiply chromose administered as purification of subsequent preparations of these materials and to monitor consisting as the single chain hormones administered as advugs; The single chain hormones administered as advugs; The single chain of subsequent between antibodies specifically immunoreactive with these new compounds, as substitutes for the heteroflancic forms of hormones. The present sequence is human single chain gonadotropin and one one breitand to the invention and so consisting of human chorinic gonadotropin (CG) beta-subunit (1-12 and one one) of the sequence is the subunit (1-12 and one one) of human chormone of human chormone of humans.

Consisting and DDPR peptide fused to human single chain gonadotropin and one compound for template directed version and one peptide fused to human single chain gonadotropin and one consisting sequence is not shown in the specification, but is derived from thuman single chain gonadotropin and one of the human single chain gonadotropin and cut-ved from 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Watch 71.4%: Score 555, DB 22; Length 234; Best Local Smalarity 85.5% pred. 40.9, 2e-43; Local Smalarity 85.5% pred. 40.9, 2e-43; Indels 0; Caps Matches 106; Conservative 0; Mismatches 18; Indels 0; Caps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 be buy or RNA encoding single chain protein useful in treating infertulity, as aids in vitro fertulization techniques, or other therapeutic methods associated with the native hormones.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 186
AAY43286
ID AAY43286 standard; Protein; 242 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 9; Column -; 87pp; English.
94US-0199382.
94US-0289396.
94US-0310590.
94US-034628.
94US-0351591.
95US-0475049.
                                                                                                                                                                                                               (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                        WPI; 2001-366474/38.
                                                                                                                                                                                                                                                                       Bolme I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 234 AA;
18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAP 125
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AAY43293;

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The sequence is an analogue comprising amino acids 1-118 of mature hGC beta subunit having residues 102-107, 109, 10, and 112-118 replaced by the corresponding residues in the hESH protein. It was prepd. by site directed mutagenesis of a cDNA sequence encoding the hGC bets subunit. The chimerit horomone is capable of directing horomone binding to both it and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15041, AAR15061-R15125 and AAR15161-R151298).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 71.2%, Score 553; DB 12; Length 118; Best Local Similarity 92.8%, Pred. No. 6.9e-41; Conservative 2; Mismatches 6; Indels 0; Gaps Matches 103; Conservative 2; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; glycoprotein hormone; infertility; in vivo fertilisation; single chain gonadotropin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive wacchnes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein hormone; fertility; immuno-castration;
Immuno-confragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Single chain gonadotropin analogue #7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU04608 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900S-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91WO-US03162.
                                         11-FEB-1992 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Campbell RK, Moyle WR;
                                                                                                                             hCG/hFSH chimera, B10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1991-353528/48.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-NOV-1991.
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AAU04608
ID AAU0460
NAME OF STREET O
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                     Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 SKRPLAPRCRPINATLAVERECCPVCITVATTICACYCPHTRULGOVLPALEQVYCNYR 61 | 11111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        189 DVRFESIRLPGCPRGVDPVVSFPVALSCRCALCRRSTSDCGGPKDHPLTCDHPQ 242
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                                                                                                                                                                       HLH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR15070 standard; Protein; 118 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 6; Fig 19; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0059625,
                                                                             19-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 242 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-0CT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR15070;
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AAR15070
ID AAR1507
XX
AC AAR1507
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The invention relates to human single chain forms of the glycoprotein charmone quarter which is an agonist or antagonist of lutterhishing hormone content which is an agonist or antagonist of lutterhishing hormone (THM). follicle stimulating hormone (FSH), thyroid stimulating hormone (TSH), thyroid stimulating hormone (TSH) and the stimulating hormone in the stimulating stimulating the stimulating stimulating the stimulating stimulating the stimulating stimul
                                                                                                                                                                                                                                                                                                                                                                                                                                      121.134
/note- "Corresponds to 95-108 amino acids of human follicle stimulating hormone (FSH) beta-subunit*
135.142
/note- "Liker peptide"
143.234
/note- "Corresponds to 1-92 amino acids of human single chain gonadotropin alpha-subunit*
                                                                                                                     Human; single chain gonadotropin analog no:7; anti-infertility; drug; peptide therapy; lutefathising hormone; IH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein.
                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
11.120
//note- "Corresponds to 1.100 amino acids of human chorionic gonadotropin (CG) beta-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                Human single chain gonadotropin analog no:7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 9; Fig 11; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94US-0199382.
94US-0289396.
94US-0310590.
94US-034628.
94US-0351591.
95US-0475049.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-0918288.
                          04-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UNIW ) UNIV WASHINGTON
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N-PSDB; AAD08797.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bolme I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                        Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US6238890-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-MAY-2001.
                                                                                                                                                                                                                                                                                                                                     Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Region
                                                                                                                                                                                                                                                                                                                                                                                                                                             Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Region
          The sequence represents the amino acid sequence of single chain gonadorroptin analogue #7. The giveportoein homomoe analogue is an addotroptin analogue #8. The giveportoein homomoe analogue is considered and analogue #8. The giveportoein homomoe analogue is considered and the considered in a manner similar to the methods associated with the native componence, and in other therapoutic methods associated with the native protests and in other therapoutic methods associated with the native protests and in other therapoutic methods associated with the native protests and in detect in a manner similar to the heterodimer, as a disposit cool to detect the presence of antibodies with respect to the native proteins in the presence of antibodies with respect to the native proteins in the levels of these homomes in various samples, and in detecting and locate is of these homomes to honodimers have the following adventages over their dimeric forms: they are more stable, problems of recombinant production are reduced since only a single gene is needed to transcribe, could not accompanie to the dimeric form the studies of the dimeric form and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives. Single chain forms are unique starting materials for identifying truncated forms with the protein to be engineered without disturbing the overall folding of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 71.2%; Score 553; DB 22; Length 234; Best Local Similarity 85.5%; Pred. No. 1.44-0.48; Indels 0; Gaps Matches 105; Conservative 0; Mismatches 18; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLOGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 190
AMEO1480
ID ARBO1480 standard; Protein; 234 AA.
X AAEO4480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 11; Fig 11; 86pp; English.
                                                                                             97US-0918288.
94US-0199382.
94US-0289396.
94US-031628.
94US-0351591.
95US-0475649.
                                                     99US-0282357
                                                                                                                                                                                                                                                                                                                                  (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-424301/45.
N-PSDB; AAS08497.
                                                                                                                                                                                                                                                                                                                                                                                    Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAP 125
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                                                  31-MAR-1999;
                                                                                                                                                       12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
05-JUN-2001.
                                                                                                    25-AUG-1997;
18-FEB-1994;
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//note- 'Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid'
165..142
1/35..142
1/31..334
//note- 'Linker peptide'
//note- 'Corresponds to 1-92 amino acids of human single Chain gonadotropin alpha-subunit'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; single chain gonadotropin analog no:3a; anti-infertility; drug; peptide therapy; lutefalsiang hormone; Lif follicle stimulating hormone; FSB; thyroid stimulating hormone; TSB; chorlonic gonadotropin; CG; glycoprotein; Infertility; fusion protein; mutant; mutefn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                               The single-chain gonadotropin analogue 3a (human LH-beta(1-114) INSX1-linker-human GG-alpha(1-92) [PSZX,WSRX]) can be derived from analogue 3 by removing at least one of the glycosylation sites. The partially deglycosylated analogue has anti-lutefinising hormone (lutropin) activity and can be used for facilitating hormaniating pregnancy and reducing analogue necetion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
21..134
/note= "Corresponds to 1-114 amino acids of human buteinising hormone (LH) beta-subunit"
50
                                                                                                                                                                                                                                                            Methods for altering fertility in mammals, egp. humans - e.g. stimulating fertility by reducing the activity and/or levels circulating slyco-protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match 71.0%; Score 552; DB 16; Length 234; Best Local Similarity 80.6%; Pred. No. 1.76-42; Metches 100; Conservative 6; Mismatches 18; Indels (
                                                                                                                                                                                                                                                                                                                                                                   Example 24; Fig 8 and Page 60; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human single chain gonadotropin analog no:3a.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAE04510 standard; Protein; 234 AA.
          95WO-US02067
                                                      94US-0199382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                WPI; 1995-302553/39.
                                                                                                         (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference
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          17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141 GSAP 144
                                                      18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04 - SEP - 2001
                                                                                                                                                                Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAE04510;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT. 192
AAABO451, 192
AABO451, 192
AABO4
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analog no: Telated to the invention. Analog no:7 is a fusion protein consisting of human chorinoic granddorrouln (GG) betas subunit (1.100 amino exits) and follicle stimulating hormone (FSH) beta subunit (19-108 amino acits) fused to human single chain gonadorroph alpha-subunit (19-2 amino acits) that Inker sequence. This analog serves as a useful starting momental for template directed vaccine desires as a useful starting hormone-specific vaccines for use in humans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 135..142

Abbel- linker

143..234

/label- Gonadotropin_alpha_subunit_(1-92)

194

/note- "wild-type Asn at position 52 of the alpha-
subunit is pref. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Misc-difference 220
/note= "wild-type Asn at position 78 of the alphasubunit is pref. replaced by another amino acid (esp. Gln) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Jouce *wild-type Asm at position 30 of the beta-
subunit is pref replaced by another amino
acid (esp. Gin) to remove a glycosylation
site*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Single chain gonadotropin; human chorionic gonadotropin; hCG; phph; beta; subunit; analogue; glycoprotein hormone; fertility; inhibit; stimulate; increase; lutropin; luteinising hormone; LH; follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Partially deglycosylated single chain gonadotropin analogue 3a.
                                                                                                                                                                                                                                                            Owery Match 71.2; Score 53; DB 22; Length 234; Bost Local Similarity 85.5%; Pred. No. 1.4e-42. Matches 106; Conservative 0; Mismatches 18; Indels Matches 106; Conservative 0; Mismatches 18; Indels 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR86261 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                            Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 SKAP 125
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAY-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR86261;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
Peptide
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      88888888
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0; Gaps

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The sequence is an analogue of mature hCG beta subunit having several residues replaced by the corresponding residues in the bovine LH protein and residues 23-145 deleted. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, apoinst and/or antagonist.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 70.7%; Score 549.5; DB 12; Length 122; Best Local Similarity 78.1%; Pred. No. 1.5e-42; Indels 9; Gaps Matches 100; Conservative 7; Mismatches 12; Indels 9; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New glyco-protein hormone analogues - for inducing fertility as famuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH: GG; bovine.
                                                                                                                                                                                                                                                                                                            AAR15105 standard; Protein; 122 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Table IV; Page 63; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                      11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hCG/bLH chimera, D9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 122 AA;
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                                                                                                 122 SKAP 125
                                                                                                                                                          141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo saplens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W09116922-A.
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                                                                                                                                                                                                                                                                                                                                                                             AAR15105;
                                                                                                                                                                                                                                                   RESULT 193
AAR15105
ID AAR1510
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 194
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to human single chain forms of the glycoprotein forman quartet which is an agonist or an angonist of intelliging hormone component of the control of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
/note- "Hild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"

Misc-difference 220

/note- "Hild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Outery Match 71.0%; Score 522; DB 22; Length 234; Best Local Similarity 80.6%; Pred. No. 1.7e-42; Indels 0: Gaps Matches 100; Conservative 6; Mismatches 18; Indels 0: Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 SIEPRAPHCRINATLAVEREGCPVCITVNTTICAGYCPTHTRVLGGVLPALPQVVCNYR 61 1:11111 | 111111 | 111111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               we DNA or RNA encoding single chain protein useful in treating infertility, as alds in vitro fertilization techniques, or other therseutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 9; Column -; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                     940S-0199382.
940S-0289396.
940S-0316290.
940S-0334628.
950S-0475049.
970S-0853524.
                                                                                                                                                                                                                                                                                                                97uS-0918288.
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                                                                                                                                                                                                                                                                                                                                                                 18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1994;
09-MAY-1997;
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Anote-'Corresponds to 95-111 amino acids of human folice stimulating hormone (FSH) beta-subunit*
Anote-'Linker peptide'
Act. 37
Anote-'Corresponds to 1-92 amino acids of human single chain gonadorropin alpha-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; single chain gonadotropin analog no:6; anti-infertility; drug;
peptide therapy; lutefinising hormone; Li; follicle stimulating hormone;
FSH: thyroid stimulating hormone; TSH: chorionic gonadotropin; CG;
glycoprotein; infertility; fusion protein.
                                                          21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note "Corresponds to 1-100 amino acids of human chorionic gonadotropin (CG) beta-subunit 121..137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                              Human single chain gonadotropin analog no:6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
21..120
                                                                                                                                                                                                                                                                                                                  AAE04479 standard; Protein; 237 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 9; Fig 10; 87pp; English.
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94US-0289396.
94US-0310590.
94US-034628.
94US-0351591.
95US-0475049.
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                                                                                                                                                                                                                                                                                                                                                                                                     04-SEP-2001 (first entry)
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N-PSDB; AAD08795.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US6238890-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-AUG-1997;
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                                                                                                                                                         122 S 122
                                                                                                                                                                                               141 $ 141
                                                                                                                                                                                                                                                                                                                                                        AAE04479;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Region
                                                                                                                                                                                                                                                                   REGULT 195
AACO447
AAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequence represents the amino acid sequence of single chain good and analogue 16. The giveportein homeone analogue 18. Conductorpin analogue 16. The giveportein homeone analogue 18. Conductorpin analogue 18. The giveportein homeone analogue 18. Conductorpin and in other therapeutic methods associated with the native hormone. The single chain protein is further useful as a reagent in a manner similar to the heterodimer, as a diagnostic tool to detect the conductorpin analogue 18. Conductorpin and the presence of antibodies with respect to the native proteins in the bological samples, as a control reagent in assay fits for assessing the presence of antibodies with respect to the native proteins in the bological samples, as a control reagent in assay fits for assessing the crevels of these hormones in various samples, and in detecting and protess, provide an aircraft of production are reduced since only a single spen is needed to transactible, translate and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives, single chain forms are unique starting analorism of vivo half lives. Single chain forms care unique starting analorism to invivo half lives. Single chain consistent control to be engineered without disturbing the overall folding of the consistent of the dimer. The linkage between the subunits permits the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 70.7%; Score 549; DB 22; Length 237; Best Local Similarity 86.0%; Pred. No. 3.3e-42; Matches 104; Conservative 2; Mismatches 15; Indels 0; Gaps
                                                                                                                                                                                                                       Human; glycoprotein hormone; infertility; in vivo fertilisation; single chain gonadotropin.
                                                                                                                                                                             Single chain gonadotropin analogue #6.
AAU04607
ID AAU04607 standard; Protein; 237 AA.
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0918288.
94US-0199382.
94US-0289396.
94US-0334628.
94US-0351591.
95US-0475649.
                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0282357
                                                                                                                                 (first entry)
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N-PSDB; AAS08495.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 237 AA;
                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                 US6242580-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             25 - AUG - 1997)
18 - FEB - 1994)
12 - AUG - 1994;
22 - SEP - 1994;
04 - NOV - 1994;
07 - JUN - 1995;
09 - MAY - 1997;
                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAR-1999;
                                                                                                                              23-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                          05-JUN-2001.
                                                                                     AAU04607;
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The invention relates to human single chain forms of the glycoprotein hormone quartet which is an agonist or antagonist of lutenialing hormone (ER), follicle stimulating hormone (ER), thyroid stimulating hormone (FS), thy of or chorionic gnadokropin (CG). All these hormones are heterodimers

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nce 99
// Anote - wild-type val at position 79 of the beta-
subunit is replaced by Thr to agree with the
121..129
// Alabel - hFSH_beta_subunit_(95-103)
// Alabel - hFSH_beta_subunit_(95-103)
// Alabel - hFSH_beta_subunit_(95-103)
// Alabel - DRSH_beta_subunit_(105-103)
// Alabel - DRSH_Alabel - Subunit_Alabel - DRSH_Alabel - DRSH_Alabel - Inker
113..134
// Alabel - Inker
113..234
// Alabel - Gonadotropin_alpha_subunit_(1-92)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The single-chain gonadotropin analogue 8b (human CG-beta(1-100) (N13X N30X,P791,PRS1Y)=LEGS1-101-100PF 110AF Three-human CG-alpha (1192) [N32X,N30X,P79]-RES1PE-beta(95-103)-00PF 110AF Three-human CG-alpha priving an extra glycosylation site. Addition of oligosaccharides has a positive effect on stability of hormones in circulation and can be used to present unwanted antibody or receptor interactions. The present analogue has anti-follicle stimulating hormone (follitropin) and anti-intenhising hormone (fultropin) activity and is useful for treating ovarian hyperstimulation and reducing spermatogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21 SKEPLRPRCRPIXATLAVEKEGCPVCITVXTTICAGYCPTWIRVLGGVLRALPQVVCNYR 80
                                                                                                /note- "wild-type Pro at position 78 of the beta-
subunit is replaced by another amino acid
to agree with the glycosylation site motif"
                                                                                                                                                                                                                                                                                                                                                                                                                                Anote "wild-type Asm at position 52 of the alphasubunit is pref. replaced by another amino acid (esp. Gin) to remove a glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "wild-type Asn at position 78 of the alphasubunit is pref. replaced by another amino acid (esp. Gin) to remove a glycosylation site"
       acid (esp. Gln) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wethods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating slycosprotein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              70.3%; Score 546; DB 16; Length 234; 84.7%; Pred. No. 6e-42; 1ve 0; Mismatches 19; Indels C
                                            /note- "Arg corresponds to CCG codon" Misc-difference 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 25; Fig 13 and Page 60; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94US-0199382.
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Best Local Similarity 84.7
Matches 105; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             220
/note-
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                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Misc-difference
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-FEB-1995;
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having identical alpha subunits and differing beta subunits. The agonist forms of single chain hormones are used in treating intertility, as aids can vitro fertilisation techniques, and other therapeutic methods associated with the native hormones. The single chain hormones are useful cassociated with the native hormones. The single chain hormones are useful cast reagants in a manner similar to heterodimers, as diagnostic tools to detect the presence of antibodies with respect to the native proteins in the control reagants in assay kits for assessing the biological samples, as control reagents in assay kits for assessing the receptors of the native hormones blind the single chain hormones are also used in affinity chromatographic preparation of receptors or antihomone antibodies. They are used as purification tools for antihomone antibodies they are used as purification tools for clavates of single chain hormones antihodies specifically manuoreactive leving outside the present DNA sequence is human single chain operator in the heterodimeric forms of the hormones. The present DNA sequence is human single chain gonadotropin and one of coding sequence related to the invention. Analog nois coding sequence related to the invention, and and one of coding sequence related to the invention. Analog nois coding sequence related to the invention, and one of its a customit (1:100 anno acids) and follicle stimulating hormone (FSH) betactionable subunit (1:09 anno acids) and follicle stimulating hormone (FSH) betact subunit (35:11) anno acids) fused to human single chain gonadotropin and subunit (35:11) anno acids) fused to human single chain gonadotropin and acids) fused to human single chain gonadotropin and acids) fused to human single chain gonadotropin and sequence. This analog serves to subunit (35:11) anno acids) fused to human single chain gonadotropin and sequence in humans.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15, Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Single chain gonadotropin analogue 8b with extra glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         force wild-type Asn at position 13 of the beta-
force subunit 1s pref. replaced by another amino
acid (esp. Gln) to remove a glycosylation
site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Misc-difference 50
/note= "wild-type Asn at position 30 of the beta-subunit is pref. replaced by another amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Single chain gonadotropin; human chorionic gonadotropin; hCG;
appha; beta; subunit; analogue; glytpoprotech normone; fertility;
inhibit; stimulate; increase; lutropin; luteinising hormone; LH;
follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 70.7; Score 549; DB 22; Length 237; BBst Local Similarity 86.0%; Pred. No. 3.34-6.7 Maches 149; Conservative 2; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
1..20
1..20
21..120
71..120
71.abel- hCG_beta_subunit_(1-100)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR86276 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 237 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 S 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141 S 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR86276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 196
AAR86276
ID AAR8627
XX
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61 0; Gaps

Gaps

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The sequence represents the amino acid sequence of human lutefnising charmone beta subunit, amino acids 1-14. The protein is an important glycoprotein hormone beta-rediencr, along with chorionic gonadcorrent glycoprotein hormone heterodimer, along with chorionic gonadcorrent glycoprotein hormone heterodimer; along with chorionic gonadcorrent glycoprotein hormone heterodimer; along with chorionic gonadcorrent glycoprotein hormone heterodimer; along simulating hormone (TH), which all have identical alpha subunits but differing beta subunits. The proteins are useful for generating antibodies specifically improved the vith new roupounds, as substitutes for the exterior forms of the hormones, in the treatment of infartility, as east for in vivo fertilisation techniques, and in other therpeutic correct for the native hormones. The single chain proteins as diagnostic tools to detect the presence of antibodies with respect to the native proteins in the biological samples, as control reagents in assign detecting and purifying receptors to which the native hormones can din detecting and purifying receptors to which the native hormones build. The single chain forms of the heterodimers or homodimers have the Collowing advantages over their dimeric forms; they are more stable, problems of recombinant production are reduced since only a single gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; chorionic gonadotropin; hCG; glycoprotein hormone; infertility; luteinisism hormone; Lif; follicle stimulating hormone; PSH; thyroid stimulating hormone; TR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques.
                                                       Human luteinising hormone beta subunit, amino acids 1-114.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 19; Column 35; 86pp; English.
                                                                                                                                                                                                                                                                                                                           AAU04622 standard; protein; 114 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-0918288.
94US-0199382.
94US-0289396.
94US-0334628.
94US-0351591.
95US-0475049.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0282357.
                                                                                                                                                                                                                                                                                                                                                                                                                         23-OCT-2001 (first entry)
      Matches 98; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-424301/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bolme I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US6242580-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo saplens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUN-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-AUG-1997;
18-FEB-1994;
12-MUG-1994;
22-SEP-1994;
07-DEC-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
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                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                               A method has been developed for predicting the likely timing of the chast of menopause for a perimenopausia female. The method comprises of externating the amount of human luterinising homeone beta core fragment (hiff-beta of) in a sample from the subject by: (a) contacting a sample with an antibody (ab), which specifically binds to hiff-beta of incheracting a sample conditions permitting formation of a complex between the Ab and charter of complex between the Ab and charter of this heat of kill-beta of inches with the sample determined in step (b) with the amount of hiff-beta of in the subjects sample determined in step (b) with the amount of hiff-beta of in the sample step of the sample of the amount of hiff-beta of in the sample and indicates subject, where an amount of hiff-beta of in the sample stand and amount of the sample similar to the level in the known postmenopausal female subject, where an amount of hiff-beta of monopause and amount of the sample similar to the level in the known postmenopausal complex sample and indicates of menopause. An hiff-beta of has been sendoral distance from the onset of menopausa of characterize hiff-beta sample samilar to the level in the known premenopusal contacterize hiff-beta sample samilar to the level in the known postmenopausal contacterize hiff-beta sample samilar to the level in the known premenopusal contacterize hiff-beta of expression in the urine of both reproductive and contacterize hiff-beta sacessing ovarian function and to determine the effect of reference represents an hiff-beta fragment used in the contact of emenopausal female. The contact inventor of the present intention of the present inventor.
Determination of human luteinising hormone beta core fragment in urine samples, useful for predicting onset of menopause
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; luteinising hormone; beta core fragment; hLH; menopause; urine; antibody; hLH-beta cf.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Birken S, Kovalevskaya GI, Maydelman Y, O'Connor JF;
                                                                                                                                                                                                                                                                                                                                                                                                                   Human luteinising hormone beta fragment.
                                                                                                                                                                                                                                                                    AAY29594 standard; protein; 122 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 162; 165pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYCO ) UNIV COLUMBIA NEW YORK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US02279.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0018122.
                                                                                                                                                                                                                                                                                                                                                                     15-OCT-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-494116/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 122 AA;
                                                                                              122 SKAP 125
                                                                                                                                               141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09939202-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo saptens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-FEB-1998;
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                                                                                                                                                                                                                                                                                                                    AAY 29594;
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70.1%; Score 545; DB 20; Length 122; 84.5%; Pred. No. 3.8e-42;

Query Match Best Local Similarity

Gaps

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properties, compared to wild type CKGPs, are claimed. The CKGP capperfamily compisses at least four families of growth factors: the capperfamily comprises at least four families of growth factors in a glycoprotein hormones, the platelet-derived growth factor-best family, the che meurotrophins and the transforming growth factor-best family; the cc families are known to be structurally similar (especially comprising the cc cysticines for topology) and it was shown that mutations at certain of positions in the CKGP hairpin loops of family members and other members of the CKGF superfamily could significantly alter the biological activities of the CKGP.

Card without the CKGP is a significantly alter the biological card and mutant thyroid stimulating hormone (TSH) heterodimes or analogue capperfamily administering the compressible of the CKGP.

Card are also useful to treat or diagnose thyroid cancer, by administering the mutant heterodimes or analogue to stimulate lodine uptake, and compressible administering radiolabeled iddine to treat the cancer or enable radiolabel detection (claimed).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 SKEPLRPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The patentors claim a vaccine effective against mammalian fertility comprising a vaccinia virus genome having disposed unit, in a non-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 DVRFESIRLPGCPRGVNPVVSTAVALSCOCALCRRSTTDCGGPKDHPLTCDDPR 115 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Auto-antigen vaccines conferring antigenicity using multimers
etc. - useful as species specific or cross-species effective,
esp. for controlling fertility in mammals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Onery Match 70.00; Score 544; DB 21; Length 121; Best Local Similarity 85:11; Pred. No. 4.78-42; Matches 9; Conservative 6; Mismatches 11; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence of human beta luteinising hormone (LH).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAP60602 standard; Protein; 141 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example; Fig 4; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85US-0756847.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUL-1991 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Talmadge KD, Fiddes JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1986-346608/52.
N-PSDB; AAN60524.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 121 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo saplens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-JUN-1986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-DEC-1986.
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04-JUN-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W08607383-A.
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Peptide
Protein
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AAP60602
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is needed to transcribe, translate and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives. Single chain forms are unique starting materials for identifying truncated forms with the activity of the dimer. The linkage between the subunits permits the protein to be engineered without disturbing the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This is the wild type human luteinizing hormone beta subunit. Mutants comprise at least one electrostatic charge altering mutation in a beta hairpin loop, resulting in increased bisoctivity. Mutant cystime knot growth factor (CKGP) proteins comprising one or more mutant subunits and having novel properties or improved pharmacological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        human luteinizing hormone; beta subunit; CKGF; mutant;
cystine knot growth factor; haliphi loop; thyroid stimulating hormone;
TSH; hypothyroidism; thyroid cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New mutant cystine knot growth factor proteins comprising one or more mutant subunits, vastul for treating or preventing diseases e.g. hypothyroidism and thyroid cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /label. beta_hairpin_loop_1
1.33
/note= "mutant optionally comprises one or more substitutions in these residues, preferably a basic residue."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match 70.0%; Score 544; DB 22; Length 114; Best Local Similarity 85.1%; Pred. No. 4.46-4.3 Matches 97; Conservative 6; Mismatches 11; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      58..87
/label- beta_hairpin_loop_3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human luteinizing hormone beta subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cocation/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 199
AAY92001
ID AAY92001 standard; Protein; 121 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 73; Page 297; 320pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYMA-) UNIV MARYLAND BALTIMORE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Weintraub BD, Szkudlinski MW;
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Domain
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essential region, a DNA sequence of formula : (Hormone)n; n= 1-20; Hormone- DNA sequence derived from the sequence encoding a reproductive hormone. The hormone is esp. LH, GnRH, CG or FSH. 8 X 8 8 8

Sequence 141 AA;

Ouery Match 70.0%; Score 544; DB 7; Length 141;
Best Local Similarity 85.1%; Pred. No. 5.44-42;
Matches 97; Conservative 6; Mismatches 11; Indels 0; Gaps

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Search completed: October 11, 2002, 17:57:49 Job time : 39 secs

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GenCor Copyright (c) 199	 protein search, 	October 11, 2002,	US-09-813-398-3 score: 777 : 1 PSKEPLRPRCRPINATL	BLOSUM62 Gapop 10.0		number of hits satisfying	DB seq length: 0 DB seq length: 200000000	cessing: Minimum Match (Maximum Match I Listing first	: Issued_Paten	7: /cgn2_6/ptodata/1 4: /cgn2_6/ptodata/1 5: /cgn2_6/ptodata/1 6: /cgn2_6/ptodata/1	ed. No. is the number ore greater than or e is derived by analy	•	Query Score Match Length	:	770 99.1 145	99.1	99.1	99.1	99.1 99.1	99.1 98.7	98.7	. 6.0	98.3	98.3	98.1	96.3	95.6	95.2 95.2
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Sequence 2, Appli Sequence 4, Appli Sequence 76, Appli Sequence 76, Appli Sequence 5, Appli Sequence 5, Appli	Sequence 5, Appli Sequence 5, Appli Sequence 2, Appli Sequence 19, Appl Sequence 19, Appl	Sequence 19, Appl Sequence 19, Appl Sequence 18, Appl		Sequence /, Appli Sequence 24, Appl Sequence 24, Appl	Sequence 24, Appl Sequence 24, Appl	Sequence 24, Appl Sequence 2, Appli	22.	90.	Sequence 2, Appli Sequence 10, Appl	< <	, ,	ر ف	; _; c	* *	Sequence 12, Appl Sequence 12, Appl	18,	ì.	- -	Sequence 1, Appli Sequence 22, Appl	22,	100	Sequence 8, Appli Sequence 8, Appli	Sequence 2, Appli	Sequence 2, Appli	Sequence 2, Appli Sequence 203, App	Sequence 322, App	203,	Sequence 2, Appil Sequence 2, Appli	Sequence 4, Appl1 Sequence 4, Appl1	4 -	÷	Sequence 7, Appli Sequence 6, Appli	6, 161
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GERGAL INCURANT BAILE. Dominique
APPLICANT BELLET, Joan Hichel
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 1000, Pred. No. 1.15-66;
Host Actions 440; Conservative 0; Hismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : Homo sapiens
BETA-SUBUNIT HUMAN CHORIONIC GONADOTROPIN
REFERENCE/DOCKET NUMBER: 0240,002
TELECONMUNICATION INFORMATION:
TELEPHONE: 510-601-2706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELERAX: 110-655-3542
INFORMATION POR SEQ 1D NO: 10
SEQUENCE CHARACTERISTICS:
LENGTH: 145 annino acids
TYPE: annino acids
STRANEDRESS: single
TYPE: TOPOLOGY: linear
TYPE: TYPE: PERIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN:
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0; Gaps

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GENERAL INFORMATION:
APPLICANT: BLIGHT, DomInique
APPLICANT: BLIGHT, DomInique
APPLICANT: BLIGHT, DAMINICHEL
APPLICANT: USANG, MICHAI
APPLICANT: LAZAR, VICHAI
TITLE CE INVENTION: MALICANT BUNAN CELL TRANSPORMATION DETECTION NETHOD
FILE REPERENCE: 06569,104
CURRENT PAPLICANTON NUMBER: 05/99/142,320
CURRENT FILING DATE: 1998-09-04
CURRENT FILING DATE: 1998-09-04
EMALIER PAPLICANTON NUMBER: RR 96 02683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 99.1%; Score 770; DB 4; Length 145; Best Local Smilarity 100.0%; Pred. No. 1.3e-66; Indels Matches 140; Conservative 0; Mismatches 0; Indels
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Patent No. 623890

CEREAL INCORATION

APPLICANT BOINE ITVING

APPLICANT BOINE INTINGENERAL OF THE

TITLE OF INVENTION: SINGLE-GRAIN FORMS OF THE

TITLE OF INVENTION: GLYCOPROTEIN HORMONE QUARTET

NUMBER OF SEQUENCES: 83

CORRESPONDENCE ADDRESS:

ADDRESSEE: MORRISON & FORESTER

STREET: 2000 Pennsylvania Avenue, NW, suite 5500

CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CONTRY: USA
ZIP: 2006-188
ZIP: 2006-188
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFWHARE: PASEESD for Windows Version 2.0
CURRENT APPLICATION NUMBER: US/08/918,288
                            ; Sequence 15, Application US/09142320
; Patent No. 6194154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
APPLICATION NUMBER: 08/853,524
APPLICATION NUMBER: 09/82.1997
APPLICATION NUMBER: 08/199,382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: PRT
; ORGANISM: human
US-09-142-320-15
            US-09-142-320-15
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GEOGRAPH 14-320-14

Sequence 14, Application US/09142320

Sequence 14, Application US/09142320

Sequence 14, Application US/09142320

GENERAL INFORMATION:

APPLICAT: Bellet Dominique

APPLICAT: Bellet Dominique

APPLICAT: Bellet Dominique

APPLICAT: Bellet Dominique

APPLICAT: HORAL MICHEL

APPLICAT: HORAL JEAN

TITLE OF INVERTION: MALICANANT HUMAN CELL TRANSFORMATION DETECTION METHOD

CURRENT FILMS (AND 100)

CURRENT PLING DATE: 1996-00-04

SEARLIER APPLICATION NUMBER: PG-228

RARLIER RELING DATE: 1996-03-04

NUMBER OF SEQ ID NOS: 1996-03-04

NUMBER OF SEQ ID NOS: 200-04

SEQ ID NOS: 40-05-04

SEQ ID NOS 14-05-05-04

SEQ ID NOS 14-05-05-04

LENGTH: 145
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CURRENT FILING DATE: 1998-09-04
RANLER APLICATION WOMER: PCT/FR97/00361
RARLIER FILING DATE: 1997-02-28
REALIER FILING DATE: 1997-02-8
RANLIER FILING DATE: 1999-03-04
NUMBER OF SEQ ID NOS: 24
SOFWARE: Patentin Ver. 2.0
SEQ ID NO 113-01-145
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                                                                                                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: human
US-09-142-320-13
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; ORGANISM: human
US-09-142-320-14
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RESULT 6

Length 145;

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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
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(US-08-918-29

(US-08-918-2)

(US-08-918-
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COMPREY: USA
ZIF: Z0006-1888
COMPUTER READABLE FORM:
WEDLING TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING STEEM: DOS
SOFTWARE: FestSED for Windows Version 2.0
SOFTWARE: RestSED for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION WHERE: US/08/918,288
FILING DATE:
RELIAM APPLICATION DATA:
RELIAM APPLICATION DATA:
RELIAM APPLICATION WHERE: 09/282,357
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FILING DATE: 09-NAY-1897
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/ACENT INFORMATION:
NAME: MITABAHIGE, KATE H
REGISTRATION NUMBER: 29,959
REFERENCE/CACET NUMBER: 29,959
TELECHONE: 202-887-1500
TELECHONE: 202-887-1500
TELECHONE: 202-887-1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 68:
SEQUENCE CHANGTERISTICS:
ELEVETH: 145 anino acida
TITE: anino acid
TITE: anino acid
TITE: Anino acid
TITE: Anino acid
TOPOLOGY: Ilnear
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SEQUENCE CHARACTERISTICS:
LENGTH: 265 amino acids
TYPE: amino acids
STRANDEDNESS: single
       TELEFAX: 202-887-0763
TELEX:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 145;
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US-09-282-597-68
US-09-282-597-68
Sequence 68, Application US/09282357
Patent NO. 6425-69
Sequence 68, Application US/09282357
Sequence 68, Application US/09282357
Sequence 68, Application US/09282357
SECTIONATION SINGLE-CHAIN FORMS OF THE TITLE OF INVENTION SINGLE-CHAIN FORMS OF THE TITLE OF INVENTION SINGLE-CHAIN FORMS OF THE STREET: 2000 Pennsylvania Avenue, NW, suite 5500 STREET: 2000 Pennsylvania Poenue, NW, suite 5500 STREET: 2000 Pennsylvania Avenue, NW, suite 5500 STREET: 2000 Pennsylvania TYPE: STREET: 2000 Pennsylvania Avenue, NW, suite 5500 STREET: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 99.1%; Score 770; DB 4;
Best Local Similarity 100.0%; Pred. No. 1.3e-66;
Matches 140; Conservative 0; Mismatches 0;
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RECISTRATION WIMBER: 29,959
REFERENCE/DOCKET NUMBER: 29500-20050.25
TELECHMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
FILING DATE: 18-FEB-1994
ATTORNIY-KGERT INFORMATION:
NAME: MUTABLIGE, KALE H
RECLESTATION NUMBER: 29,599
REPERBNCE/DOCKET NUMBER: 295
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION POR SCO ID NO: 68:
SEQUENCE CHARCTERISTICS:
LENGTH: 145 amino acids
FPE: amino acid
FPE: amino acid
FPE: TREE: amino acid
FPE: TREE: TREE: TREE
ISTANDEDRESS: single
                                                                                                                                                                           29,959
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                    21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTHTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                 2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
          99.1%; Score 770; DB 4; Length 265; 100.0%; Pred. No. 2.6e-66; Live 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER REMOMBLE FORM:
MEDITH TIPE: Disabethie
COMPUTER: INH Compatible
OFFRATING SYSTEM: DOS
OFFRATING SYSTEM: DOS
OFFRANTING SYSTEM: DOS
CURRENT FAPLICATION HOWER: US/09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29,959
FR: 29500-20050.25
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CLASSITICATION: 536
PRIOR REPLICATION DATA:
APPLICATION UNDER:
RILHG DATE: 25 ANG-1997; 24
APPLICATION WINDER: 08/85; 24
FILHG DATE: 09-MAY-1997
APPLICATION WINDER: 08/199, 382
FILHG DATE: 18-FEB-1994
ATTORNEY AGENT INFORMATION:
ATTORNEY AGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: WIRTSHIP OR WATER TO SEE THE REGISTRATION NUMBER: 29,959
REPERRECEDORGET WINDER: 2950
TELECOMMUNICATION INFORMATION:
TELECHONE: 202-887-1500
TELEFAX: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0
Matches 140; Conservative
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SEQUENCE CHARACTERISTICS:
LENGTH: 265 amino acid
TYPE: amino acid
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15-08-198-19
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16-58-1
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
APPLICATION NUMBER: 08/853,524
FILING DATE: 09-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
TORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Murashige, Kate H.
REGISTRATION NUMBER: 29,959
REFERENCE/POCKET NUMBER: 20500
TELEPHONE: 202-887-1500
TELEFAX: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141 SKAPPPSLPSPSRLPGPSDT 160
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SEQUENCE CHARACTERISTICS:
LENGTH: 265 anino acids
TYPE: amino acid
STRANDEDNESS: single
; TOPOLOGY: linear; MOLECULE TYPE: protein; FRAGMENT TYPE: internal US-08-918-288-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear
HOLECULE TYPE: protein
FRAGMENT TYPE: Internal
US-08-918-288-39
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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61

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Sequence 2, Application US/08709924

Sequence 2, Application US/08709924

GENERAL INFORMATION:
APPLICANT: Gallo, Robert C.
APPLICANT: Bayant, Joseph C.
APPLICANT: Lunardi-Itskandar, Yanto
ITILE OF INVERTION: WETHOOS OF PRONOTING HEMATOPOIESIS
TITLE OF INVERTION: WETHOOS OF PRONOTING HEMATOPOIESIS
CORRESPONDENCES: 26
CORRESPONDENCES: 26
CORRESPONDENCES: 26
CORRESPONDENCES: 26
COUNTRY: New York
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
      81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98.7%; Score 767; DB 2; Length 165; 99.3%; Pred. No. 2.9e-66; Live 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE 1005-2711

COMPUTER READABLE PORM:

MEDIUM TYPE READABLE PORM:

COMPUTER: ILDA PV GLOWALTHE COMPOUTER: ILDA PV COMPATION COMPOUTER:

COPERATING SYSTEM: PC. COMPATION COMPOUTER: DATACH RELASE PLOYON WOMER: US/08/709, 24

FILING DATE: 09-SEP-1996

ATTORNEY AGENT INFORMATION: 14

ATTORNEY AGENT INFORMATION: 14

NAME: MISTORY IS 18/92

REFERENCE/COCKET NUMBER: 8769-018

TELEPHONE: (212) 869-9741/8864

TELEPHONE: (212) 869-9741/8864

TELEPHONE: (212) 799-990

TELEFAM: (512) 869-9741/8864

TELEPHONE: (513) 869-9741/8864
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                                                        122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                  141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 99.31
Matches 139; Conservative
                                                                                                                                                                            RESULT 13
US-08-709-924-2
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US-08-709-925-2
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                                                                                                          62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
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21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLGGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLOGVLPALPQVVCNYR 61
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Best Local Similarity 100.0%; Pred. No. 2.6e-66; Indels
Matches 140; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                    STATE: DC
COUNTRY: USA
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPACTIBLE
COMPACTIBLE
COMPACTION
APPLICATION NUMBER: US/09/282,357
FILING DATE: 25 AUG-1997
FILING DATE: 35 AUG-1997
FILING DATE: 18 -FEB-1994
FILING DATE: NUMBER: 08/199,382
FILING DATE: NUMBER: 08/199,382
FILING DATE: NUMBER: 08/199,382
FILING DATE: NUMBER: 08/199,382
FILING DATE: NUMBER: 08/1997
FILING DATE: 18 -FEB-1994
FILING DATE: NUMBER: 08/1997
FILING DATE: NUMBER: 08/199,382
FILING DATE: NUMBER: 08/1997
FILING DATE: NUMBER: 29/50-20050.25
                                                                                                                                                                            TECLEX:
INFORMATION FOR SEQ ID NO: 39:
SEQUENCE CHARACTERISTICS:
LENGTH: 265 amino acidd
TYPE: amino acidd
STRANDEDNESS: single
TOPOLOGY: linear
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TELEFAX: 202-887-0763
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HOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-09-282-357-39
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| Sequence | Application US/08425673 |
| Sequence | Application US/08425673 |
| Sequence | Application US/08425673 |
| Patent No. 550826 |
| General Inconduction | Application | Applic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 98.7%; Score 767; DB 4; Length 165; Best Local Similarity 99.3%; Pred. No. 2.9e-66; Matches 199; Conservative 1; Mismatches 0; Indels Matches 199; Conservative 1; Mismatches 0; Indels
                          WEDIUM TIPE: Floppy disk
COMPUTER: IRM FC COMPALLE
COMPUTER: IRM FC COMPALLE
CORRANTES STSTEM: PC-TOS/NS-DOS
SOFWARE: Patentin Release #1.0, Version #1.30
SOFWARE: Patentin Release #1.0, Version #1.30
SOFWARE: Patentin Release #1.0, Version #1.30
SOFWARE: PATENTIN BATE: US/08/709,948
FILING DATE: 09-SEP-1996
CLASSIFICATION: AD-1996
CLASSIFICATION: AD-1996
CLASSIFICATION: AD-1996
STEPREMENTION: AD-1996
TELEPRATION: AD-1990
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/17,151
FILING DATE: 18-JUN-1991
ATTORNET, AGENT INFORMATION:
NAME: WUCCIOO, RICDARD R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 16
US-08-425-673-1
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APPLICANT: Bryant, Joseph, Anto APPLICANT: Bryant, Joseph, APPLICANT: Hardfileshafar, Yatto TITLE OF INVENTION: FREATHER AND PREVENTION OF CANCER BY TITLE OF INVENTION: TREATHER AND PREVENTION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROPIN WHERE OF SEQUENCES:
CORRESPONDENCE ADDRESS:
CORRESS ADDRESS:
CORRESS ADDRESS ADDRESS:
CORRESS ADDRESS 
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APPLICART: Bryant, Ocoeph
APPLICART: Lunardi, 138andar, Yanto
APPLICART: Lunardi, 138andar, Yanto
TITLE OF INVENTION: TREATHERT AND PREVENTION OF HIV INFECTION
TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN GHORIONIC GONADOTROF
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 98.7%; Score 767; DB 2; Length 165; Best Local Smilarity 99.3%; Pred. No. 2.9e-66; Metches 199; Conservative 1; Mismatches 0; Indels Matches 199; Conservative 1; Mismatches 0; Indels
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1155 Avenue of the Americas
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Patent No. 6319504
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: New York
STATE: New YORK
COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
STREET: 115
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US-08-709-948-2
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Length 145;

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Sequence 1. Application Us/08298189B
Sequence 1. Application Us/08298189B
Sequence 1. Application Us/08298189B
Sequence 1. Application Us/08298189B
SERVAL INFORMATION: Cancer S. Cole and Dr. Andrew Kardana
TITLE OF INVENTION: Cancer S. Timners and Assay Productive
TITLE OF INVENTION: Cancer S. Timners and Assay Products:
TITLE OF INVENTION: Therefor Therefor
NUMBER OF SEQUENCES: 1
CORRESPONDERE ADDRESS: 1
CORRESPONDERE ADDRESS: 1
CONTRESPENDERES: 1
CONTRESPENDERES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 99.3%; Score 764; DB 1; Length 145
Best Local Smularity 99.3%; Pred. No. 4.9e-66;
Matches 139; Conservative 0; Mismatches 1; Indels
Matches 139; Conservative 0; Mismatches 1; Indels
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NAME/KET: beta subunit of hCG that is nicked by GBNE
LOCATION: hCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDENTIFICATION METHOD: N-terminal sequence analysis PUBLICATION INFORMATION: ACTRORS: Reutmann et alia TITLE: A Receptor-Dinding Region in Human Ch JONENAL: PETOR Nat'1 Acad Sci USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 SKAPPPSLPSPSRLPGPSDT 140
                           ; TOPOLOGY: linear; MOLECULE TYPE: pept.; HYPOTHETICAL: NO; ANTI-SENSE: NO US-08-425-673-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 18
US-08-298-1898-1
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APPLICANT: Campbell, Robert R.
TTILE OF INVENTION: Analogs of Glycoprotein Hormones Having
TTILE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TTILE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TTILE OF INVENTION: Methods For Preparing and Using Same
NUMBER OF SEQUENCES: 12
CORRESPONDING ADDRESS:
ADDRESSE: Richard R. Muccino
STRES: No. Dex 1867
CITY: Princeton
STRES: No. Dex 1867
CONTRY: USA
CONTRY: USA
CONTRY: USA
CONTRY: REA PC COMPATIBL
CONTRY: THE PC CONTRY: THE PC COMPATIBL
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CONTRY: THE PC CONTRY: THE PC CONTRY: THE PC CONTRY: THE PC CONTRY THE PC CONTRY: THE PC CONTRY TH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
CLASSIPICATION: 514
PRIOR APPLICATION BATA:
APPLICATION NUMBER: US 07/11/151
FILING DATE: 18-JUN-1991
ATTORNEY/AGENT TRYCORAVION:
NAME: MUCCIAO, RICHARD R.
REGISTRATION NUMBER: 12,539
REFERENCE/DOCKEY NUMBER: UMD 10-004
TELECOMMUNICATION: TRECOMMUNICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/08425673
Patent No. 5508261
GENERAL INFORMATION:
REGISTRATION NUMBER: 32,538
REFERENCE/DOCKET NUMBER: UMI
PELECOMMUNICATION IMPORMATION:
TELEPHONE: (609) 466-2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (609) 466-776

INPORMATION FOR SED ID NO: SEDUENCE CHARACTERISTICS: LENGTH: 145 mains acid TYPE: amins acid TYPE: Amins acid TYPE: TYPE: TYPE: peptide HYPOTHETICA: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; ANTI-SENSE: NO
US-08-425-673-1
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US-08-425-673-2
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Choriogonadotrophin/Lutopri

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21 SKEPLRPRCRPIGATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                            Query Match 98.3%; Score 764; DB 4; Length 181; Best Local Similarity 99.3%; pred. No. 6.3e-66. Hetches 189; Conservative 0; Hismatches 1; Indels Matches 189; Conservative 0; Hismatches 15
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No. 6.3e-66; Matches 139; Conservative 0; Mismatches 1; Indels Matches 139; Conservative 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 20
Sequence 16, Application US/09282357
Sequence 16, Application US/09282357
Patent NO 6445590
Patent NO 6445590
Patent NO 6445590
PAPLICANT BOILE, ILIVING
PAPLICANT BOILE, MILLIAM R.
PAPLICANT BOILE STATEM
CORRESPONDENCE ADDRESS:
PAPLICANT R.
STATE CORRESPONDENCE ADDRESS:
PAPLICANT R.
STATE PAPLINGUE OF STATEM STAT
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ZIP: 30006.1888
COMPUTER: RENDABLE PORM:
COMPUTER: IBM COMPORTE:
COMPUTER: IBM COMPORTE:
COMPUTER: TOS COMPUTER:
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PILING DATE: 05/09/2013)
PILING DATE: 05/09/2013)
PILING DATE: 25 AUG-1997
PILING DATE: 25 AUG-1997
PILING DATE: 09-487-1997
PILING DATE: 18-FEB-1994
ATTORNET, CARM INCHER: 09/199, 382
PILING DATE: 18-FEB-1994
ATTORNET, CARM INCORATION
NAME: MICHARION NUMBER: 29,099
REPERRING, FOCKET NUMBER: 29,099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 SKAPPPSLPSPSRLPGPSDT 141
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SEQUENCE CHARACTERISTICS:
LENGTH: 181 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDENESS: Single
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGNENT TYPE: internal
US-09-282-157-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q
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08-040-348-36
15-640-040-35. Application US/08918289
15-640-040-053-890-36
15-640-040-053-890-36
15-640-040-053-890-36
15-640-040-053-890-36
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RILING DATE. NUMBER: 08/853,524
FILLING DATE. 09-NAY-1997
APPLICATION NUMBER: 08/199,382 A
FILLING DATE: 10-1994,382 A
FILLING DATE: 10-1994,382 A
ATTORNEY/ADER: 10-1994,10-1994
ATTORNEY/ADER: 10-1994,10-1994
REFERENCE/POCKET NUMBER: 29,959
REFERENCE/POC
yyOLUME: 84 12727 applicable 1508: 2038-2042 1508: 1987E: 
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                                                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-918-288-36
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APPLICANT: Bellet. Dominique
APPLICANT: Bellet. Jean-Michel
APPLICANT: Vidaud, Michel
APPLICANT: Lezar, Vidaldinir
TITLE OF INVENTION: MALIGNANT HUMAN CELL TRANSFORMATION DETECTION METHOD
FILE REFERENCE: 056591/0110
                                                                                                                                                                                                                                                                                    2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                 96.5%; Score 750; DB 4; Length 145; 97.9%; Pred. No. 1.1e-64; Indels tive 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match 96.3%; Score 748; DB 4; Length 145; Best Local Similarity 97.3%; Pred. No. 1.7-e-6. Westers 137; Conservative 0; Wismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Xaa at position 117 is an Ala or Asp 0S-09-142-320-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: consensus sequence
FEATURE:
OTHER INFORMATION: Xaa at postition 2 is a Lys or Arg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Xaa at position 4 is a Pro or Met FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT PELLOGATION UNDER: US/09/142,320
CURRENT PILIGO DATE: 1998-09-04
EARLIER PILIGO DATE: 1998-09-04
EARLIER FILLOD DATE: 1998-09-04
EARLIER FILLOD DATE: 1995-02-28
EARLIER FILLOD DATE: 1996-03-04
SOFTWARE: PRICHOUS DATE: 1996-03-04
SOFTWARE: PRICHOL WEY: 2.0
SED ID NO 4
LENGTH: 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/09142320 Patent No. 6194154 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                              122 SKAPPPSLPSPSRLPGPSDT 141
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SEO ID NO 11
; LEWOTH: 145
TYPE: PRT
; ORGANISM: human
US-09-147-320-11
                                                                                                                                    Query Match 96.5%
Best Local Similarity 97.9%
Matches 137; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: human
FEATURE:
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US-09-142-320-4
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APPLICANT BATE DOMINIQUE
APPLICANT BASE DOMINIQUE
APPLICANT LAZAT VIAGINAL
PULICANT LOS INVENTION HABER US/09/142,330
CURRENT APPLICANTON HABER US/09/142,330
CURRENT PILING DATE: 1998-0-04
EARLIRE APPLICATION HUBER: PC 90 02683
EARLIRE PULICATION HUBER: PC 90 02683
EARLIRE PULICATION HUBER: PC 90 02683
SARILE DI NOS: 24
SOFTWARE: PRECEIT VOS: 20
SOFTWARE: PRECEIT VOS: 24
SOFTWARE: PRECEIT VOS: 24
SOFTWARE: PRECEIT VOS: 24
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(S-09-142-130-11
) Sequence 11, Application US/09142320
) Patent No. 61914154
) GREEAL INFORMATION:
APPLICANT: Bellet, Dominique
APPLICANT: Bellet, Dominique
APPLICANT: Udadat, Jean-Wichel
APPLICANT: Lasar, Vladimir
TITLE OF INVENTION: MALIGNAR HUMAN CELL TRANSFORMATION DETECTION METHOD
FILE REFERENCE: 065691/0140
CURRENT FILEM DATE: 1998-09-04
EARLIER FALLKG DATE: PST-709-02-28
EARLIER FILEM OATE: 1997-02-28
EARLIER FILEM OATE: 1996-09-04
NUMBER OF SEQ ID NOS: 24
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                                                                         61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRAGASS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTIDCGGPKDHPLTCDDPR#QDS$S 121
0; Gaps
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                                                                                                                                                                                                                                    RESULT 21
US-09-142-320-16
; Sequence 16, Application US/09142320
; Patent No. 6194154
; GENERAL INFORMATION:
                                                                                                                                                                          141 SKAPPPSLPSPSRLPGPSDT 160
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US-09-142-320-16
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us-09-813-398-3.default.rai

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68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAPPP 127
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95.2%; Score 740; DB 4; Length 307; 100.0%; Pred. No. 2.2e-63; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: PLOPPY disk
MEDIUM TYPE: PLOPPY disk
COMPUTER: IBM PC compatible
ODFRATING SYSTEM: PC-DSS,405-DOS
SOFTWARE: PRECENTIN RELEASE #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/804,166
FILING DATE:
CLASSIFICATION:
FILING DATE: 20 FULLIAND DATA:
CLASSIFICATION NUMBER: GO/011,936
FILING DATE: 20 FULLIAND NUMBER: GO/011,936
TITLE OF INVENTION: HYBRID PROTEINS
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSE: BROMDY AND NEIMARK
ADDRESSE: BROMDY AND NEIMARK
STREET: 419 Sevenih Street N.W., Ste. 300
STREET: Washington
STREE: D.C.
COUNTRY: U.S.A
LIP: 22207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: BROWDY AND NEIWARK
STREET: 419 Seventh Street N.W., Ste. 300
CITY: Mashington
STATE: D.C.
STATE: D.C.
IIP: 22207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 26
US-08-910-91-4
US-08-910-91-4
Sequence 4, Application US/08910991
PRICAL NO 619417
CREERAL INFORMATION:
APPLICANT: Campbell, Robert K.
APPLICANT: Jameson, Bradford A.
APPLICANT: Jameson, Bradford A.
APPLICANT: Chappel, Scott C.
TITLE OF INFENTION: HYBRID PROTEINS
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 25,618
REFERENCE/COCKTE NUMBER: CAP
TELECOMMUNICATION INFORMATION:
TELEPRA: (202) 628-5197
TELEPRA: (202) 737-528
INPORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: ZZZU/
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.0
Matches 134; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: Linear

MOLECULE TYPE: protein

US-08-804-166-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                128 SLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                289 SLPSPSRLPGPSDT 302
                                                                                                                            CHERAL INFORMATION:

APPLICANT: Campbell, Robert R.

APPLICANT: Campbell, Robert R.

TITLE OF INVERTION: Allered Receptor Binding Specificity and Activity and TITLE OF INVERTION: Allered Receptor Binding Specificity and Activity and TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and WINGERSONDER RADBESS:

CORRESSONDER ALCHARTOR: New Jersey

CORRESSONDER RADBESS:

ADDRESSER: New Jersey

CONFOUR: USA

INFORMATION: TOPE INPOPULATION

COMPOTER: INPOPULATION DATA:

APPLICATION DATA:

APPLICATION DATA:

APPLICATION DATA:

APPLICATION DATA:

APPLICATION NUMBER: US 07/717,151

ATTOMETY ACTION INFORMATION:

NAME: MUCCHIO, RICHART R.

RESERENCE/DOCKET NUMBER: US 07/717,151

ATTOMETY ACTION REPRESS: US 07/717,151

TELECHOMET (609) 466-2760

INFORMATION FOR ESQ ID NO: 10:

SECURCES CHARACTERISTICS:

LENGTH: 14 5 amino acids

TOPE CHARACTERISTICS:

LENGTH: 14 5 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 95.6%; Score 743; DB 1; Length 145; Best Local Similarity 96.4%; Pred. No. 5e-64; Indels Matches 135; Conservative 1; Hismatches 4; Indels
                                                               Sequence 10, Application US/08425673
Patent No. S508261
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Campbell, Robert K.
Jameson, Bradford A.
Chappel, Scott C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 SKAPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
HOLECULE TYPE: peptide
HYPOTHETICAL: NO
US-08-425-673-10
                         RESULT 24
JS-08-425-673-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 25
US-08-804-166-4
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Length 336; 0; Indels

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8 PRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLGGULPALPOVVCNTHDVRFES 67
119 PRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLGGVLPALPALPACVVCNTHDYRES 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAPPP 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 28

1. Sequence 8, Application US/08910991

1. Sequence 8, Application US/08910991

1. Patent No. 618317

1. GENERAL INFORMATION:

1. APPLICANT: Campbell, Robert K.

1. APPLICANT: Chappel, Scott C.

1. TITLE OF INVENTION: HERRID PROTEINS

1. CORRESPONDENCES: 22

1. CORRESPONDENCES: 22

1. CORRESPONDENCES: 22

1. CORRESPONDENCES: 22

1. CORRESPONDENCES: 23

1. CORRESPONDENCES: 24

1. CORPUTER: 1. EMP COMPATION: 1. CORPUTER: 1. CORPUTER: 1. CORPUTER: 1. CORPUTER: 1. EMP COMPATION: 1. CORPUTER: 1. C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 95.2%; Score 740; DB 4; 18est Local Similarity 100.0%; Pred. No. 2.5e-63; Matches 134; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 February 1996
                                                                                                                                              25,618
        PILING DATE: 20 February 1:
CLASSIFICATION:
ATYORNEY/AGENT INFORMATION:
NAME: Broady, Roger L.
REGISTRATION NUMBER: 25.61
REFERENCE/COCKET NUMBER: CI
TELECOMMUNICATION INFORMATION
TELEPHONE. (202), 628-5197
                                                                                                                                                                                                                                                                   INTERENA: (202) 737-5529

INTORAKTON FOR SED ID NO: 8: SEQUENCE CHARACTERISTICS: LENGTH: 336 amino acids TYPE: amino acid TOPOLICY: linear TOPOLICY: linear MOLECULE TYPE: protein US-08-804-166-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          169 PRCRPINATLAVEREGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYRDVRFES 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 PRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 95.2%; Score 740; DB 4; Length 307; Best Local Similarity 100.0%; Pred. No. 2.2e-6; Indels Matches 14; Conservative 0; Mismatches 0; Indels
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OFFRAINE: Petentin Release #1.0, Version #1.30
COTRARE: Petentin Release #1.0, Version #1.30
COTRARE: Petentin Release #1.0, Version #1.30
COTRACTION NUMBER: US/08/910, 991
FILING DATE: 108/04,166
FILING DATE: 20 February 1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/011, 936
FILING DATE: 20 February 1996
ATTORIEZ/ARTIND PATE: 20 February 1996
ATTORIEZ/ARTIND PATE: 20 February 1996
ATTORIEZ/ARTIND PATE: 10 February 1996
ATTORIEZ/ARTIND PATE: 10 February 1996
ATTORIEZ/ARTIND PATE: 10 February 1996
ATTORIEZ/ARGANT INFORMATION: NAME: VON. Allen C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ...LICANT: Cample II. Robert K.
APPLICANT: Cample II. Robert K.
APPLICANT: Jameson, Bradford A.
APPLICANT: Chappel. Scott C.
TITLE OF INVENTION: HYBRID PROTEINS
TOTHER OF SEQUENCES: 22
CORRESPONDENCES: 22
CORRESPONDENCES: 23
CORRESPONDENCES: 20
CORRESPONDENCES: 20
CORRESPONDENCES: 20
CORRESPONDENCES: 20
CORRESPONDENCES: 20
COUNTRY: USA
TIPE: D.
COUNTRY: USA
TIPE: 22207
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FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 27
105-08-804-166-8
US-90-804-166-8
Patent No. 6193972
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ION NUMBER: 37,971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: C. TELECOMMUNICATION INFORMATION TELEPHONE: (202) 628-5197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (202) 737-352
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
ELENTH: 307 amino acid
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-910-991-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    289 SLPSPSRLPGPSDT 302
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MEDIUM TYPE: Floppy COMPUTER: IBM PC com
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21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                 Ouery Match 83.4%; Score 648; DB 4; Length 234; Best Local Similarity 95.7%; Pred. No. 18-54. Matches 118; Conservative 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 83.4%; Score 648; DB 4; Length 234; Best Local Similarity 95.2%; Pred. No. 1e-54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 6. Application US/09282557

Parent No. 6242580

CREMEAL INFORMATION: TITLE OF THE TITLE OF INFURION: GINCORNES OF THE TITLE OF INFURION: GINCORNES IN HORMONE QUARTET NUMBER OF SEQUENCES: 83

CORRESPONDENCE: 83

CORRESPONDENCE: 83

CORRESPONDENCE: 83

CORRESPONDENCE: 84

COUNTRY: WASHINGTON & FORESTER

STREET: 2000 Pennsylvania Avenue, NM, suite 5500

CITY: NASHINGTON

CITY: NASHINGTON

COUNTRY: USA

COUNTRY: USA

COUNTRY: DIASHINGTON

COUNTRY DIASHINGTON

COUNTRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: ReasLSDG for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/282,357
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29500-20050.25
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PRIOR APPLICATION: 536

PRIOR APPLICATION DATE:
PRIOR APPLICATION DATE:
PRIOR APPLICATION NUMBER: 06/918,288

FILING DATE: 03-444-1997

APPLICATION NUMBER: 08/199,382

APPLICATION NUMBER: 08/199,382

APPLICATION NUMBER: 08/199,382

APPLICATION NUMBER: 08/199,382

APPLICATION NUMBER: 29/999

REFERENCE/DOCKET NUMBER: 29/999

REFERENCE/DOCKET NUMBER: 29/999

REFERENCE/DOCKET NUMBER: 29/999

TELECOMMUNICATION INFORMATION:
TELEBRANE: 202-897-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: (SEQUENCE CHARACTERISTICS: LENGTH: 234 amino acids TYPE: amino acid
            ; FRAGMENT TYPE: internal US-08-918-288-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-09-282-357-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141 GSAP 144
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Query Match
105.18; Score 740; DB 4; Length 336;
Best Local Smilarity 100.04; Pred. No. 2.5e-6;
Matches 134; Conservative 0; Mismatches 0; Indels
Matches 134; Conservative 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: BOINE, ITVING
APPLICANT: BOINE, ITVING
APPLICANT: BOINE, ITVING
APPLICANT: MOTICE, MILIAM R.
TITLE OF INVENTION: GINCLE-CHIN FORMS OF THE
TITLE OF INVENTION: GINCLE-CHIN FORMS OF THE
TITLE OF INVENTION: GINCLE-CHIN BORNORE GUARTET
NUMBER OF SOURCES: 83
CORRESPONDENCE: ADDRESS:
STREET: 2000 Pennsylvania Avenue, NM, suite 5500
CITY: Meahington
STATE: GOA
CONGURER: GUARALE FORM:
MEDIUM TYPE: DIskette
COMMUTER REALABLE FORM:
MEDIUM TYPE: DIskette
COMMUTER REALABLE FORM:
MEDIUM TYPE: DIskette
COMMUTER: LIBM Competible
OPERATING SYSTEM: DOS
SOFTWARE: REASESD FOR Windows Version 2.0
CURRENT APPLICATION NUMBER: US/08/918,288
FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRICASSISTANTON DATA:
APPLICATION NUMBER: 09/282,357
APPLICATION NUMBER: 08/83,524
FILING DATE: 09-44X-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGENT THFORMATION:
NAME: NUMBER: 08/199,382
REFERENCE/COCKET WINDRER: 29,959
REFERENCE/COCKET WINDRER: 29,959
REFERENCE/COCKET WINDRER: 29,959
REFERENCE/COCKET WINDRER: 29,059
TELECOMMUNICATION INFORMATION:
TELEFONE: 202-807-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 29
US-08-918-288-6
IS-08-918-288-6
IS-08-918-288-6
IS-08-08-918-288-9
IS-08-08-08-918-288-9
IS-08-08-08-08-9
IS-08-08-08-08-9
IS-08-08-08-08-9
IS-08-08-08-08-9
IS-08-08-08-08-9
IS-08-08-08-08-9
IS-08-08-08-08-9
IS-08-08-08-08-9
IS-08-08-08-08-9
IS-08-08-08-9
IS-08-08-9
IS-08-0
| INFORMATION FOR EDG ID NO: 8:
| SEQUENCE CHARACTERISTICS:
| LEMETH: 336 mains cids
| TIPE: amins cid cid
| TOPOLOGY: Ilnear
| NOLECULE TYPE: protein
| GG-08-910-991-8
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SEQUENCE CHARACTERISTICS:
LENGTH: 234 amino acids
TYPE: amino acids
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 single
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MOLECULE TYPE: protein
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0; Gaps

6; Indels

0; Mismatches

Matches 118; Conservative

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61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 114
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPR 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                  RESULT 32
US-09-282-157-69
Sequence 69, Application US/09282357
Patent No. 642259.
GENERAL INFORMATION:
CENERAL INFORMATION:
TILLE OF INVENTION: SINGLE-CHAIN FORMS OF THE TITLE OF INVENTION: GLYCOPROTHEIN HORMONE QUARTET TORRESPONDENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 84
CORRESPONDENCES: 84
CORRESPONDENCES: 85
CORRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 81.5%; Score 633; DB 4; is Best Local Similarity 100.0%; Pred. No. 1.2e-53; Matches 114; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTE: IBM Compatible
COMPUTE: IBM Compatible
OPERATING STEER: DOS
SOFTWARE: PASICED for Windows Version 2.0
CURRENT MEVICATION DATA:
FILING DATE:
CLASSIFICATION NUMBER: US/09/282,357
FILING DATE: 35 MC-1997
APPLICATION NUMBER: 08/918,288
FILING DATE: 35 MC-1997
APPLICATION NUMBER: 08/9183,524
FILING DATE: 18-PEB-1994
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-PEB-1994
ATTOREX AGENT: 18-PEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Murashige, Kate H
REGISTRATION UNDBER: 29,959
REPERBUCE/DOCKET NUMBER: 29500-20050.25
RELECOMUNICATION INDREMATION:
TELECOMUNICATION INDREMATION:
TELEPAX: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 24, Application US/08918288
Patent No. 623899
REBERAL INFORMATION:
APPLICANT: BOHE, Irving
APPLICANT: WOILE, William R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 69: SEQUENCE CHARACTERISTICS: EXPURENCE TITLE: LENGTH: 114 amino acid STRANDEDMESS: single TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TOPOLOGY:
US-09-282-357-69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
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                                                                                                                                                                                                                                 21 SKEPLRPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                         2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLOGVLPALPQVVCNTR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVALSCOCALCRRSTTDCGGPKDHPLTCDDPR 115
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 31

912-08-918-328-69

18-08-918-328-69

18-08-918-318-69

18-08-918-318-69

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2.1P: 20066-188
2.1P: 20066-188
COMPUTER READABLE FORM:
MEDIUM TYPE: Distette
COMPUTER: IEM COMPATIBLE
OPERATING SISTEM: DOS
SOFTAME: PASTEGN FOR WINDOWS VERSION 2.0
CURRENT APPLICATION NUMBER: US/08/918,288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9500-20050.25
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APPLICATION NUMBER: 08/853,524
APPLICATION NUMBER: 08/199,382
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILTER DATE: 18-FEB-1994
ATTORNEY/CABET INSPARATION:
NAME: Murashige, Kate H
REGISTRATION HUMBER: 29-959
REFERENCE/DOCKET NUMBER: 29-959
TELECOMMUNICATION INFORMATION:
TELEGRAN: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 6
SEQUENCE CHARACTERISTICS:
LENGTH: 114 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                      122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TOPOLOGY:
US-08-918-288-69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ογ
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PAPLICANT: Moyle William R.
APPLICANT: Campbell, Robert K.
APPLICANT: Campbell, Robert K.
APPLICANT: Campbell, Robert K.
TITLE OF INVENTION: Analogs of Glycoprotein Hormones Having
TITLE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TITLE OF INVENTION: Altered Receptor Binding Specificity and Activity and
WHORE OF SEQUENCES: 12
CAMPRESPONDER: ADDRESS:
ADDRESSE: Richard R. Muccino
STREET: P.O. Box 1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 74.9%; Score 582; DB 4; Length 234; Best Local Similarity 88.7%; Pred. No. 2e-48; Matches 110; Conservative 0; Mismatches 14; Indels
                     STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington
STATE: DC
                                                                                                                                   COUNTRY: USA
2.12: 2006-188
2.12: 2006-188
COMPUTER READABLE FORM:
MEDLUM TYPE: Disfecte
COMPUTER: IBM COMPATIBLE
OPERATING STSTEM: DOS
SOFTWARE: PASSECE FOR WINDOWS VERSION 2.0
CURRENT APPLICATION NUMBER: US/09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29,959
29,950
29500-20050.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 536

PRIOR APPLICATION DATA
APPLICATION DATA
PRICATION NUMBER: 06,918,288
FILING DATE: 25 AGC-1997
APPLICATION NUMBER: 06,825,524
APPLICATION NUMBER: 06,825,524
APPLICATION NUMBER: 06,199,382
FILING DATE: 18-FEB-1999,382
ATTORNY AGENT INFORMATION:
NAME: NATEABLIGE, Ket 9 H
RECISTRATION NUMBER: 29,59
RETERRENKE/DOCKET NUMBER: 29,59
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 234 amino acida
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: Innear
HOLECULE TYPE: Loctein
FRACHENT TYPE: Internal
US-09-282-357-24
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TITLE OF INVENTION: SINGLE-CHAIN FORMS OF THE TITLE OF INVENTION: GLYCOPROTEIN HORMONE QUARTET NUMBER OF SEQUENCES: 63
CARRESPONDENCE ADDRESSS:
CARRESPONDENCE ADDRESSS:
CARRESPEET: 2000 Pennsylvania Avenue, NM, suite 5500 CITT: Washington STARE: DC COURTE: DC COUR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: BOINE, ITVING
APPLICANT: MOTHE, WILLIAM R.
APPLICANT: MOTHE, WILLIAM R.
TILLE OF INVERTION: SINGLE-CRAIN FORMS OF THE
TILLE OF INVERTION: GLYCOPROTEIN HORMONE QUARTET
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 09-W3-5.24
FILING DATE: 09-W3-1.997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNET/AGENT INFORMATION:
NAME: MARCAIT INFORMATION:
NAME: WILSTRATION NUMBER: 29,959
FERFERANCE/DOCKET NUMBER: 29,959
TELEPHONE: 202-887-1500
TELEPHONE: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Diskette
COMPUTER: IDM COMPATIBLE
COMPUTER: IDM CAPATIBLE
OPERATING SYSTEM: DOS
SOFTWARE: RESISEN FOR WINDOWS VERSION 2.0
SOFTWARE: PARICATION DATA:
APPLICATION NUMBER: US/08/918,288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
FILING DATA
APPLICATION NUMBER: 08/853,524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 34
1S-09-282-357-24
Sequence 24, Application US/09282357
Patent No. 6242880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: MORRISON & FOERSTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CRRANCTERISTICS:
LEWGTH: 234 anino acids
TYPE: anino acid
STRANDEDNESS: single
TOPOLOGI: Illnear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
US-08-918-288-24
                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE
MEDIUM TYPE: D1
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 72.2%; Score 561; DB 1; Length 114; Best Local Similarity 92.1%; Pred. NO. 9.1e-47; Matches 105; Conservative 0; Mismatches 9; Indels
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GENERAL INFORMATION:
GENERAL INFORMATION:
DOING:
APPLICANT: BOING:
ITILE OF INFORMATION: SIGNIGE-CHAIN FORMS OF THE
TITLE OF INFORMATION: GLICOROFEIN HORNONE GUARTER
ONGRESSEE: MORRISON & FORESTER
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington
CITY: Washington
STATE: DC
COUNTRY: USA
ITIP: 20006-1888
COMPUTER READABLE FORM:
MEDINATIVE STREET: JOBACO-CHAIN FORMS
COMPUTER READABLE FORM:
GOMPOTTER: IBM COMPALISH
COMPUTER: TREADABLE FORM:
GOMPOTTER: TREADABLE FORM:
GOMPOTTER: TREADABLE FORM:
COMPUTER: TREADABLE FORM:
FULLION TIPE: TREATEN COMPALISH
COMPUTER: TREADABLE FORM:
FULLION TIPE: TREATEN COMPALISH
COMPUTER: TREADABLE FORM:
FULLION TIPE: TREATEN COMPALISH
COMPATION TREATEN COMPALISH
FULLION TREATEN FORMS
FULLION TREATE
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PRIOR APPLICATION ONTA:
PRICATION NUMBER: 09/282,357
FILING DATE: 09/484-1897
FILING DATE: 09-484-1897
ATTORNEY/AGET IRROBANTION:
NAME: MATERING SATE: 1878-1897
ATTORNEY/AGET IRROBANTION:
NAME: MATERINGS, Kete H
REGISTRATION NUMBER: 29-959
REFERENCE/DOCKET NUMBER: 29-959
TELECOMMUNICATION INFORMATION:
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US-08-918-288-9
; Sequence 9, Application US/08918288
; Patent No. 6238890
ATTORNEY/AGENT INFORMATION:
NAME: Muccino, Richard R
REGISTRATION NUMBER: 32,'
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATIC
                                                                                                                                                                                                                            TELEPHONE: (609) 466-75
TELEPHONE: (609) 466-75
INDUMATION POR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 114 millio acid
TYPE: maino acid
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MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ANTI-SENSE: NO
US-08-425-673-7
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APPLICANT: APPLICANT: ADJUST WILLIAM K.
APPLICANT: APPLICANT: ADJUST M.
TITLE OF INVENTION: Analogs of Glycoprotein Hormones Having
TITLE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TITLE OF INVENTION: Methods For Preparing and Using Same
NUMBER OF SUGURENCES: 12
CORRESSONMENCE ADDRESS:
ADDRESSE: Richard R. Muccino
STREET: P.O. BOX 167
CITY: PrinceCon 127
CONFITE: New Jersey
CONFITE: PrinceCon 127
CONFITE: New Jersey
CONFITE: New Jersey
CONFITE: New Jersey
CONFITE: PrinceCon 127
CONFITE: New Jersey
CONFITE: 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 73.2%; Score 569; DB 1; Length 114; Best Local Similarity 93.6%; Pred. No. 1.6e-07. Matches 103; Conservative 1; Wismatches 6; Indels Matches 103; Conservative 1.
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TO ACIDS AND 
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PRIOR APPLICATION DATA:
PRICE APPLICATION NUMBER: US 07/717,151
FILING DATE: 18-JUN-1991
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Patent No. 5508261
GENERAL INFORMATION:
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HYPOTHETICAL: NO
ANTI-SENSE: NO
US-08-425-673-9
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Query Match 71.9%; Score 559; DB 4; Length 234; Best Local Smilarity 81.5%; Pred. No. 7.32-64; Matches 101; Conservative 6; Mismatches 17; Indels Matches 101; Conservative 6; Mismatches 17; Indels
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US-08-191-288-21
US-08-191-288-21
Sequence 21, Application US/08918288
Patent No. 62388
SPECIAL INCORMATION:
APPLICANT: BOTHE WILLIAM R.
TITLE OF INVENTION: GLYCOPROTEIN HORNONE QUARTET
TITLE OF INVENTION: GLYCOPROTEIN HORNONE QUARTET
NUMBER OF SEQUENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 93
CORRESPONDENCES: 
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COMPUTER READABLE FORM:
WEDUNTTRE: ILAN COMPATIBLE
COMPUTER: ILAN COMPATIBLE
OPERATING SYSTEM: DOS
SOFTWARE: FASTSED FOR WINDOWS VERSION 2.0
CURRENT APPLICATION NATA:
APPLICATION WINNER: US/08/918,288
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REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 29,050-20050.25
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
TELEFAX: 202-887-0763
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
FILING DATE: 09-487-524
FILING DATE: 09-487-1937
APPLICATION NUMBER: 08/393-524
FILING DATE: 18-FEB-1194
FILING DATE: 18-FEB-1194
ATTORNEY/AGRAT REPORATION:
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SEQUENCE CHARACTERISTICS:
LENGTH: 234 amino acids
TYPE: amino acid
STRANDEDNESS: single
                     ; FRAGMENT TYPE: internal US-09-282-357-9
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MOLECULE TYPE: protein
: FRACHENT TYPE: internal
US-08-918-288-21
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COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match 71.9%; Score 559; DB 4; Length 234; Best Local Similarity 81.5%; Pred. No. 3.2e-67, Matches 101; Conservative 6; Mismatches 17; Indels Matches 101; Conservative 7.
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Sequence 9, Application US/09282357

Fatent No. 6442580

GERRAL INFORMATION: GERRAL INFORMATION: GERRAL INFORMATION: GERRAL INFORMATION: GERRAL INFORMATION: GERRAL OF INVERTION: GERRAL OF INVERTION: GERRAL OF INFORMATION: GERRAL OF INFORMATION: GERRAL OF INFORMATION: GERRAL ADDRESSE: MORRISON & FORRSTER STREET: 2000 Pennsylvania Avenue, NM. suite 5500 CITY: Mashington

CITY: Mashington

COUNTRY: USA

ZIP: TOWN
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MEDIUM TYPE: DISACTE FORM:
MEDIUM DATE: 25 AUG-1997
FILLING DATE: 09-18AY-1997
FILLING DATE: 18-FEB-1944
MATORNET/AGENT TYPESATE FORM:
MATORNET/AGENT TYPESATE FOR
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FEGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 29500-20050.25
FELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
TELEPHONE: 202-887-0763
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                                                                                              TOPOLOGY: Single TOPOLOGY: Inner TOPOLOGY: Inner TOPOLOGY: Internal US-08-918-288-9
LENGTH: 234 amino acids
TYPE: amino acid
STRANDEDNESS: single
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MOLECULE TYPE: protein
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
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CONFESSOR:
CONFESS
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; Patent No. 6238890
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INFORMATION: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 237 amino acids
TYPE: amino acid
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MOLECULE TYPE: protein
FRAGMENT TYPE: internal
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TOPOLOGY: linear
                                                                                                                                                                                                                                                     122 SKAP 125
                                                                                                                                                                                                                                                                                                                                             141 GSAP 144
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US-08-918-288-18
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                                                                                                                                                                                                                                                                        0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 40

US-09-282-357-21

Sequence 11, Application US/09282357

Sequence 11, Application US/09282357

SEQUENCE 11, Application US/09282357

SEQUENCE 11, APPLICATION SOURCE CHAIN FORMS OF THE TITLE OF INVENTION'S INDICE CHAIN FORMS OF THE TITLE OF INVENTION'S INDICE CHAIN FORMS OF THE SOURCESSES.

ADDRESSEE: ADDRESSES: ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTE READALE PORT.

MEDIUM TYPE: Diskette
COMPUTER: IMA COMPUTER: Diskette
CURRENT APPLICATION DATA:
FILING DATE: STANC1997
RILING DATE: STANC1997
RILING DATE: STANC1997
RILING DATE: OP-14AY-1997
APPLICATION WUMBER: 08/918,288
FILING DATE: STANC1997
APPLICATION WUMBER: 08/19,382
RILING DATE: OP-14AY-1997
APPLICATION WUMBER: 08/19,382
RILING DATE: OP-18AY-1097
APPLICATION WUMBER: 29,559
RECERRENCE/DOCKET WUMBER: 29,599
TELEPONNET, COMPUTER: NAME: WUMBER: 19,599
TELEPONNET, COMPUTER: NAME: WUMBER: 19,599
TELEPONNET, COMPUTER: NAME: WUMBER: 19,599
TELEPONNET, COMPUTER: NAME: NAME: WUMBER: 19,599
TELEPONNET, COMPUTER: NAME: NAME: NAME: WUMBER: 19,599
TELEPONNET, COMPUTER: NAME: NAME: NAME: NAME: WUMBER: 19,599
TELEPONNET, COMPUTER: NAME: NAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 21: SEQUENCE CHARACTERISTICS: EDUCHH: 24 amino acids TYPE: amino acid STRANDEDESS: sigle TOPOLOGY: Linear HOLECULE TYPE: procein FRAMERT TYPE: Internal US-09-282-357-21
Matches 106; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 202-887-0763
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1:11111 1 111 11111111111111111111111 111 111 111 111 111 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11
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RESULT 43

US-08-910-288-71

Sequence 71, Application US/08918288

Setent No. 6738890

GENERAL INFORMATION:

APPLICANT: WOILE, WILLIAM

TITLE OF INVENTION: SINGLE-CHAIN FORMS OF THE

TITLE OF INVENTION: GIVCOROTEIN HORMONE QUARTET

OURESSONEENCE ADDRESS:

STREET: 2000 Pennsylvania Avenue, NW, suite 5500

STATE: DC

STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       T: BOIME, Irving
T: MOYLE, William R.
T: MOYLE, William R.
SINGLE-CHAIN FORMS OF THE
INVENTION: GLYCOPROTEIN HORMONE QUARTET
SEQUENCES: 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: TBM Compatible
COMPUTER: TBM COMPATIBLE
SPETMARE: RealESD for Windows Version 2.0
CURRENT APPLICATION NATE: US/08/918,288
APPLICATION NUMBER: US/08/918,288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9500-20050.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
APPLICATION NUMBER: 08/853,524
FILING DATE: 09-MAY.1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/GEBT HFORMATION:
NAME: MUTESHIGS KATE H
REGISTRATION NUMBER: 29,959
REBERNEK-CACKET NUMBER: 29,959
TELECOMMUNICATION HIPORMATION:
TELEFRHOME: 202-897-1500
TELEFAX: 202-897-063
TELEFX: 202-897-063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
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Patent No. 6242580
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INPORMATION FOR SEQ ID NO: 71:
SEQUENCE CHRANCTERISTICS:
LENGTH: 114 amino acids
TYPE: amino acid
STRANDENNESS: SINGle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTR: USA
ZIP: 20006-1888
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
US-08-918-288-71
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                                                                                                                                                    Sequence 18, Application US/09282357

Sequence 18, Application US/09282357

PERCENT NO. 6242580

CENREAL INFORMATION:
APPLICANT: BOTHE, ITVING
APPLICANT: BOTHE, ITVING
TITLE OF INVENTION: SINGLE-CHAIN FORMS OF THE
TITLE OF INVENTION: GLICOPROTEIN HORMONE QUARTET
OORRESPONTENCES: 8

CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FORENTER
STREET: 2000 Pennsylvania Avenue, NM, suite 5500
CCUNTRY: Washington
COUNTRY: USA

ZIP: 20006-1888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTE READABLE FORM:

COMPUTE READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: EMA COMPUTED:

COMPUTER: IMA COMPUTED:

COMPUTER: MEDIUM COMPUTED:

COMPUTER: MEDIUM COMPUTED:

COMPUTER: MEDIUM COMPUTED:

CLASSIFICATION NUMBER: US/09/282,357

FILING DATE: 08/318,288

PILING DATE: 08/318,288

PILING DATE: 08/418,288

PILING DATE: 08/418,384

PILING DATE: 08/418,384

PILING DATE: 08/418,384

PILING DATE: 08/418,384

PILING DATE: 08/418,384
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NAME: NUTSABLIGG, KARE H
REGISTRATION WOMBER: 29,959
REFERENCE/CONCET NUMBER: 29,500-20050.25
FREEZONGUNICATION INFORMATION:
TELECONGUNICATION INFORMATION:
TELERAX: 202-887-150
FIREMATION FOR ENG ID NO: 18:
SEQUENCE CHARACTERISTICS:
LERKYH: 273 mallo acid
STRANDENESS: single
TOPOLOGY: linear
NOLECULE TYPE: protein
FRAGENT TYPE: internal
US-09-282-357-18
                                                                                                                                       141 5 141
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Second 15, Application US/08918288
Second 15, Application US/08918288
Patent No. 623889
GENERAL INFORMATION:
APPLICAMY: BOTHE ITVING
APPLICAMY: MOYLE, MILLIAM R.
TITLE OF INVENTION: GINCOROTEIN HORMONE QUARTER
NUMBER OF SEQUENCES: 83
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FORESTER
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CTIY: Washington
   SOPTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/425,673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CONFRY: USA
CONFRY: USA
CONFRY: 12006-188
COMPUTER READABLE FORM:
MEDIUM TYPE: Disketce
COMPUTER: IBM COMPALIBLE
COMPUTER: IBM COMPALIBLE
COMPUTER: TRACESTER: DOS
SOFTWARE: Fest-SED for Windows Version 2.0
SOFTWARE: Pest-SED for Windows Version 2.0
SOFTWARE: Pest-SED for Windows Version 2.0
SOFTWARE: PAPICATION NUMBER: US/08/918,288
CLASSIFFCATION:
PRICE APPLICATION DATA:
RPLICATION WINDER: 09/282,357
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 69.5%; Score 540; DB 1; Best Local Similarity 99.0%; Pred. No. 9.5e-45; Matches 99; Conservative 0; Mismatches 1
                                                                                                         CLASSIFICATION: 514
PRIOR PAPLICATION DATA:
APPLICATION NUMBER: US 07/717,151
FILING DATE: 18-JUN-1991
ATORNEY/AGENT INFORMATION:
NAME: MUCCINO, RICHARD R.
REDISTRATION NUMBER: 32,538
REFERENCE/POCKET NUMBER: UMD 1.0-004
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 08/853,524
FILING DATE: 09-MAY-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/ACEAT INFORMATION:
NAME: NUTSSHIPE: KREC H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: line;
MOLECULE:TYPE: p
HYPOTHETICAL: NO;
ANTI:SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 46
US-08-918-288-15
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Factor No. 5508261
Factor No. 5508261
GENERAL INFORMATION:
APPLICART: Moybe, William R.
APPLICART: Moyber K.
ITILE OF INVENTION: Alterde Receptor Binding Specificity and Activity and TITLE OF INVENTION: Alterde Receptor Binding Specificity and Activity and TITLE OF INVENTION: Alterde Receptor Binding Specificity and Activity and TITLE OF INVENTION: Alterde Receptor Binding Specificity and Activity and TITLE OF INVENTION: Alterde Receptor Binding Same
CORRESPONDENCES. 12
ADDRESSE: ALChard R. Muccino
STREET: New JOSSE
CONTRY: USA.
ILP: 08551
MEDIUM TITLE 10851
MEDIUM TITLE 10851
MEDIUM TITLE 108551
MEDIUM TITLE 10851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR.115
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 70.0%; Score 544; DB 4; Length 114; Best Local Similarity 85.1%; Fred. NO. 3.8e-45. Whereas 97; Conservative 6; Mismatches 11; Indels Matches 97; Conservative 6; Mismatches 11; Indels
ADDRESSEE: MORRISON & FOERSTER
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington
                                                                                                                        COUNTRY: USA

COUNTRY: USA

COUNTRY: USA

COUNTRY: LAN COMPALIBRE

COMPUTER: IND COMPALIBRE

COMPUTER: IND COMPALIBRE

COMPUTER: IND COMPALIBRE

COMPREME APPLICATION DATA:

FILING DATE:

FILING DATE: 25 AUG-1987

FILING DATE: 12 AUG-1987

APPLICATION NUMBER: 08/918,288

FILING DATE: 18-FEB-1997

APPLICATION NUMBER: 08/953

APPLICATION NUMBER: 08/953

APPLICATION NUMBER: 08/199,382

FILING DATE: 18-FEB-1997

APPLICATION NUMBER: 29,959

REFERENCE/OCCERT NUMBER: 29,959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 71: SEQUENCE CHRARCTERISTICS.
LEWGTH: 114 anino acids TYPE: amino acid STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TOPOLOGY:
US-09-282-357-71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 45
US-08-425-673-11
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1; Indels

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US-68-425-673-8

Sequence 8, Application US/08425673

Patent No. 550826

Patent No. 550826

Patent No. 550826

TITLE OF INVENTION: Analogo of Glycoprotein Hormones Having

TITLE OF INVENTION: Analogo of Glycoprotein Hormones Having

TITLE OF INVENTION: Attends Receptor Binding Specificity and Activity and TITLE OF INVENTION: Methods For Preparing and Using Same

CORRESCONDENCE: 13

CORRESCONDENCE: 12

CORRESCONDENCE: 120

TITLE OF INVENTION: Methods For Preparing and Using Same

CORRESCONDENCE: 120

TITLE OF INVENTION: Methods For Preparing and Using Same

CORRESCONDENCE: 120

TITLE OF INVENTION: Methods For Preparing and Using Same

CORRESCONDENCE: 120

TITLE OF INVENTION: Methods For Preparing and Using Same

CORRESCONDENCE: 120

TITLE OF INVENTION: 120

TO CORRESCONDENCE: 120

TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 68.0%; Score 528; DB 4; Length 237; Best Local Stallarity 82.6%; Pred. Mo. 2.9e-4.3; Indels Matches 10%; Conservative 3; Mismatches 18; Indels
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 237 amino acids
TYPE: amino acid
TYPE: Amino acid
                                                                                                                                                               TYPE: amino acta
STRANDEDNESS: single
TAPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTIC
LENGTH: 114 amino ac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: pept1
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 S 122
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US-08-425-673-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 47

Sequence 15, Application US/09282357

Sequence 15, Application US/09282357

PARENT NO 6242580

GENERAL INFORMATION:
APPLICANT: BOTHE, ITVING
APPLICANT: WORNING SINGLE-CHAIN FORMS OF THE
TITLE OF INVENTION: GINCORFOTEIN HORMONE QUARTET
NUMBER OF EXQUENCES:
ADDRESSEE: COMPTRESSEE: COMPTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 68.0%; Score 528; DB 4; Length 237; Best Local Similarity 82.6%; Pred. No. 2.9e-48. Matches 109; Conservative 3; Mismatches 18; Indels
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REFERENCE/DOCKET NUMBER: 29500-20050.25
RELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
    ERCISTRATOR HUMBER: 29,959
REFERENCE/DOCKET NUMBER: 29500-20050.25
TELEPROMINICATION INFORMATION:
TELEPROMINICATION TREADMENT OF TELEPROMINICATION TELEPROMINICATION TO 2007-007-00
                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENCH: 237 amino acids
TYPE: amino acids
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 18-FEB-199.
ATTORNEY/AGENT INFORMATION
NAME: Murashige, Kate H
REGISTRATION NUMBER: 29.
                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear 1 MOLECULE TYPE: protein 1 FRAGMENT TYPE: internal US-08-918-288-15
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JS-08-425-673-8

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Sequence 27, Application US/U8/U9223

FREEER NO. 5997871

GENERAL HROMANION:
APPLICANT: BYARI, JOSEPH

APPLICANT: BYARI, JOSEPH

APPLICANT: Elyanic JOSEPH

TITLE OF INVENTION: TREATHENT AND PREVENTION OF CANCER BY

TITLE OF INVENTION: ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROP

NUMBER OF SEQUENCES: 26

CORRESSONDERED: Pennie & Edmonds LLP

STREET: 1155 Avenue of the Americas

CITY: New York

CONFITE: 1003-2711

COMPITER READABLE FORM:
HEDDING 1211

COMPITER READABLE FORM:
HODING 1121

COMPITER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 51

US-06-709-948-23

US-06-700-948-23

Sequence 23, Application US/08709948

Patent No. 519504

APPLICANT: GALLO, Robert C.

APPLICANT: GALLO, Robert C.

APPLICANT: Hayari Linacid Iskandar Vanto

TITLE OF INVENTION: BY ADMINISTRATION OF HIV INPECTION

TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOT

CORRESPONDENCE ADDRESS:

ADDRESSEE Fennle & Edmonds LLP

STREAT: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

65.5%; Score 509; DB 2; Length 98;

Best Local Similarity 98.9%; Pred. No. 7.1e-2;

Matches 92; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READALE FORD
COMPUTER IN PROCREME
COUPUTER: IN PROCREME
COUPUTER: IN PROCREME
CONTAGE: BEACHTIN RELEASE 11.0, Version 11.30
SOUTWARE: PETENTIN RELEASE 11.0, Version 13.00
SOUTWARE: PETENTIN RELEASE 11.0, Version 13.00
SOUTWARE: PETENTIN DATA:
APPLICATION NUMBER: US/08/709,925
FILING DATE: 09-SEP-1996
CLASSIFICATION: SIESILE
REFERENCE/DOCKET NUMBER: 18,672
TELEPOMINICATION NUMBER: 18,670
TELEPOMINICATION NUMBER: 18,690
TELEPOMINICATIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             109 LTCDDPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
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Sequence 23, Application US/08709925
Patent No. 5997871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : 98 amino acids
amino acid
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; MOLECULE TYPE: peptide
US-08-709-925-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: New York
STATE: New York
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
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1. Sequence 23. Application US/0870924

1. Sequence 23. Application US/0870924

1. Sequence 23. Application US/0870924

1. Sequence 23. Application Callo, Robert C. Application (allo). Robert C. Application (allo). Robert C. Application (allo). Sequence 23. TITLE OF INVENTION: WENGOOD REMOVED CONTROL OF ROWNOTING HUMAN CHORIONIC CONTROL OF TITLE OF INVENTION: WENGOOD WENGOOD CONTROL OF TITLE OF INVENTION: WENGOOD SET OF RESPONDING. BOARD SES: ACCORPRES: ACCO
                                                                                                                                                                                                                                                   49 VLPALPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCOCALCRRSTTDCGGPKDHP 108
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                                                                         Query Match
66.8%; Score 519; DB 1; Length 114;
Best Local Similarity 95.0%; Pred. No. 9.38-49;
Matches 95; Conservative 1; Hismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 65.5%; Score 509; DB 2; Length 98; Best Local Similarity 98.9; Pred, No. 7.1e-7.2; Matches 9; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                            62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCDSDSTDC 100
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US-08-709-925-23
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Sequence 70, Application US/09282157
Patent No. 6242580
CREMEAL INFORMATION:
APPLICANT: BOINE.
TITLE OF INVENTION: SINGLE-CRAIN FORMS OF THE TITLE OF INVENTION: SINGLE-CRAIN FORMS OF THE CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER STREET: 2000 Pennsylvania Avenue, NW, SUITE CONTINUES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA

2.17: 2006-188

2.17: 2006-188

COMPUTER READALE FORM:
MEDIUM TYPE: Diskette
COMPUTER: INH Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSED for Windows Version 2.0
CURRENT APPLICATION BURA:
FILING ONE:
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PRIOR APPLICATION DATA
APPLICATION NUMBER: 08/918,286
FILING DATE: 25 AUG-1997
APPLICATION NUMBER: 08/853,524
FILING DATE: 09-NAT-1997
APPLICATION NUMBER: 08/199,382
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Murashige, Kate H
REGISTRATION WIMBER: 29.959
REFERENCE/DOCKET WIMBER: 295
TELECOMMULATION INFORMATION:
TELEPHONE: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INPORMATION FOR SEQ ID NO: 7
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
TYPE: amino acid
STRANDEDMESS: single
TOPOLAGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 202-887-0763
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 65.5%; Score 509; DB 4; Length 99; Best Local Similarity 98.3%; Pred. No. 7.1e-42; Matches 9; Conservative 1; Mismatches 0; Indels
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Patent No. 628890

CREERAL INFORMATION:
APPLICANT: MOINE, IT'ING
APPLICANT: MOINE, IT'ING
TITLE OF INVENTION: GINCOPROTEIN HORMORE QUARTET
OURSESSEE: MORRISON & FOERSTER
COURSESSEE: MORRISON & FOERSTER
COUNTRY: Washington
CITY: Washington
COUNTRY: USA
COUNTRY: USA
COMPUTER: LIBOS
COMPUTER: DISKETE
COMPUTER: ING COMPUTER: DISKETE
CO
MEDIUM TYPE: Floppy disk
COMPUTER: ININ PC COMPAILLE
CORPUTER: ININ PC COMPAILLE
CORPUTARE: Petentin Release #1.0, Version #1.30
CONTRARE: Petentin Release #1.0, Version #1.30
CONTRARE: Betentin Release #1.0, Version #1.30
CORRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/709,948
CLASSIFICATION: AS. Leslie
CLASSIFICATION: AS. Leslie
NAME: Misrock, S. Leslie
RESISTRATION NUMBER: 16,872
RESISTRATION NUMBER: 16,872
RESISTRATION NUMBER: 16,872
CRECENA: (212) 790-9090
TELEPRA: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                109 LTCDDPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
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APPLICATION NUMBER: 08/853,524
FILING DATE: 05-MAY-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGERI INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
CLASSIFICATION OF
PRIOR APPLICATION NUMBER: 09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Murashige, Kate H
REGISTRATION NUMBER: 29,959
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29500-20050.25

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1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                  2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTR 61
                                                                                                                                                                                                                                                                                                                    Ouery Match 65.3%; Score 507; DB 4; Length 93; Best Local Similarity 100.0%, Pred. No. 1e-41. Resear Matches 93; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 29
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
TELEFAX: 202-887-0763
                                                                                                                                                              LENGTH: 93 anino acida
TYPE: anino acid
FYRE anino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-918-288-70
                                                                                                                       INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
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US-09-282-357-70

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| US-UG-14/-150-7
| Sequence 1, Application US/08327362 |
| Sequence 2, Application US/08327362 |
| Patent No. S011244 |
| CERREAL HYPORATION: OGGIJ, Jeanine T. Griffin, Sanjaev APPLICANT: William D. OGGIJ, Jeanine T. Griffin, Sanjaev APPLICANT: Grover, Omar Caticha, Douglas T. Carrell, APPLICANT: Marion. Woods Uffectious Microorganisms TITLE OF INVENTION: Oraclerol of Infectious Microorganisms TITLE OF INVENTION: DANGLANDING Chorionic TITLE OF INVENTION: Oraclerol of Infectious Microorganisms TITLE OF INVENTION: Activity Chorionic TITLE OF INVENTION: Activity Chorionic TITLE OF INVENTION: Activity Chorionic TITLE OF INVENTION: Activity No. S811249th & Western STREET: 9035 South 700 East, Suite 200 CITY: Sandy STATE: Utah COUNTRY: USA COUNTRY: USA COUNTRY: USA COUNTRY: USA COUNTRY: USA COUNTRY: MEDIUM STREET: DIAKOTE, 3.5 Inch, 720 Kb storage OPERANDING STREET: Mord Perfect 5.1 COMPUTER RADALGHOUS DATA.

| REDIING DATA: | APPLICATION NUMBER: US/08/327,362 |
| CLASSIFICATION NUMBER: US/08/327,362 |
| REDIING DATA: APPLICATION NUMBER: 36,53 |
| REDIEMONALICATION NUMBER: 36,53 |
| REPERENCE/COCKET NUMBER: 11893 |
| TELEDROMENICATION NUMBER: 11893 |
| TELEDROMENICATIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 62.81; Score 488; DB 2; Length 88. Best Local Smilarity 100.04; Pred. No. 6.44-40; Hatch 88; Conservative 0; Mismatches 0; Indels Matches 18; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 56
US-09-158-565-2
; Sequence 2, Application US/09158565
; Patent No. 6139819
: CRNERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PLICANT: Odell, William D. PLICANT: Griffin, Jeanine PLICANT: Grover, Sanjeev PLICANT: Caticha, Omar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (801)568-0750
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 88 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
US-08-327-362-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
ORIGINAL SOURCE:
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                                                                                              Query Match 64.1%; Score 498; DB 1; Length 117; Best Local Stallarity 91.0%; Pred. No. 9,76-41; Matches 91; Conservative 2; Wismatches 7; Indels Matches 91; Conservative 2; Wismatches 7; Indels
Owery Match 65.3%; Score 507; DB 4; Length 93; Best Local Similarity 100.0%; Pred. No. 1e-41; Indels Matches 93; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 DVRFESIRLPGCPRGVNPVVSXAVALSCKCGKCDTDYSDC 100
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                                                                                                                                                                                               CLASSIFICATION: 514

PRIOR PRPLICATION DATA:
PRIOR PRPLICATION DATA:
PILING DATE: 18-JUN-1991

ATTORIEY AGENT HISTORACION:
NAME: MUCCINO, RICHARD R.
REGISTRATION HUMBER: 32,538

REPERBENCE/POCKET NUMBER: UMD 1.0-004

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    UMD 1.0-00
                                                                                                                                                                                                                                                                                                                                                                              Sequence 12, Application US/08425673 Patent No. 5508261 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 117 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ANTI-SENSE: NO
US-08-425-673-12
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US-08-425-673-12
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Length 88;

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RESULT 59
908-709-709-24
Sequence 24, Application US/08709948
Patent No. 6319504
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Sequence 24, Application US/08709924

Patent No. 5968513

GENERAL INFORMATION:
APPLICAMT: Gallo, Robert C.
APPLICAMT: Gallo, Robert C.
APPLICAMT: Gallo, Robert C.
APPLICAMT: Gallo, Robert C.
APPLICAMT: Lunard-148andar, Yanto
TITLE OF INVERTION: USING DERIVATIVES OF HUMAN CHORIONIC CONADOTROPIN
NUMBER OF SECURANCES: 26
CORRESPONDENCE ADDRESS: Lamonds
STREET: 153 Avenue of the Americas
STREET: 153 Avenue of the Americas
STREET: 153 Avenue of the Americas
COUNTR: UGA
ZIT : New York
SCHAPLE: Robert Robert COMPANIED FORM:
MEDIONITON TOWN
CONFUTER: INP ROC COMPANIED
CONFUTER: INP ROC COMPANIED
CONFUTER: 109-60-711
CONFUTER: Ploppy disk
SOFTWARE: Patentin Release #10, Version #1.30
ATTORNEY/ACRY TROBANION:
ATTORNEY/ACRY TROBANION:
ATTORNEY/ACRY TROBANION:
ATTORNEY/ACRY TROBANION:
REPERRYCAMION UNDER: 18, 872
REPERRYCAMION TOR SED IN 00: 240
TELEPRIN: Gall PENNIC
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
TYPE AMINO acid
TYPE AMINO acid
TYPE CALLOS TORS TORD ACIDS
TYPE CALLOS TORD ACIDS
TYPE CALLOS TORS TORD ACIDS
TYPE CALLOS TORS TORD ACIDS
TYPE CALLOS TORD ACIDS
TYPE CALLOS TORS TORD ACIDS
TYPE CALLOS TORD ACIDS
TYPE CALLOS TORD ACIDS
TYPE CALLOS TORD ACIDS
TYPE TORD ACIDS
TYPE CALLOS TORD T
APPLICANT: Carrell, Douglas T.
APPLICANT: Woods, II, Marion L. Marion Conadotropin-Related Protein Activity FILE REFERENCE: 1893. DIV COURRENT FILING DATE. 1998-09-22 CURRENT FILING DATE. 1998-09-22 EARLIER PLICATION WINNER: US 08/327,362 EARLIER FILING DATE: 1994-10-21 MINBER OF SEO ID MOS: 5 SOFTHANE. 1994-10-21 MINBER OF SEO ID MOS: 5 SOFTHANE. 100 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53 LPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCD 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Watch 62.8%; Score 488; DB 4; Length 88; Best Local Similarity 100.0%; Pred. WO. 6.4e-40; MtCh8s 98; Conservative 0; Mismatches 0; Indels MtCh8s 188; Conservative 0; Mismatches 188.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ....OGY: linear
; MOLECULE TYPE: peptide
US-08-709-924-24
                                                                                                                                                                                                                                                                                                                                                                                                                                         LENCTH: 88

TYPE: PRT

ORGANISM: Homo sapiens
US-09-158-565-2
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| Deer Vaccal Statistics | St. 81 | Stock | St
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSS 121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 61
10S-08-096-915-14
15 sequence 14 Application US/08086915
15 Retent No. 5444167
15 REMEMI INFORMATION
15 APPLICANT: PETERESSON, Kim SI
17TIC DO INVERTION: Variant Luteinizing Hormone Encoding DNA
18 NUMBER OF SCUENCES: 17
17 CORRESSONDERES ADDRESS:
18 STREET: 1140 Connecticut Avenue, N.M., Suite 250
17 STREET: 1140 Connecticut Avenue, N.M., Suite 250
18 STREET: 0.5 COUNTRY: U.S.A.
18 COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 57.6%; Score 447.5; DB 1; Length 149; Best Local Similarity 60.7%; Pered No. 85e-16; 85e-76; Marches 85; Conservative 15; Mismatches 35; Indels 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDION TYEE: Floppy disk
MEDION TYEE: Floppy disk
COMPUTER: IBM FO compatible
ODREATING SYSTEM: FO-TOS/AND-TOS
SOFTANE: PARCETIN Release #1.0, Version #1.25
CURRENT APPLICATION WATA:
APPLICATION WHORER: US/08/086,915
FLING DATE: U7-2UL-1993
CLASSIFCATION: 536
ATTORNET/ACERT INFORMATION:
OPERATING SISTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/425,673
                                                                                              PRPICATION NOTALL

TLING TO THE STATE OF THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SKAPP--PSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         118 SKDPPSQPLTSTSTPFGAS 137
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                                                   APPLICANT: BYART, ADSEPT C.
APPLICANT: BYART, JOSEPT C.
APPLICANT: LUBARGILISANDARY AND PREVENTION OF HIV INFECTION
ATTLE OF INVENTION: TREATMENT AND PREVENTION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROE
NUMBER OF SEQUENCES: 26
CARRESPONDENCES: 26
CARRESPONDENCE ADDRESS:
CARRESPONDENCE ADDRESSE:
CARRESPONDENCE ADDRESSE:
CITT: New YOR YOR
STREET: New YOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: World-William R.

APPLICANT: Campbell, Robert K.

TITLE OF INVENTION: Analogs of Glycoprotein Hormones Having
TITLE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TITLE OF INVENTION: Methods For Preparing and Using Same
NUMBER OF SEQUENCES. 12
CARRESPONDERCE ADDRESS:
ADDRESSEE: Richard R. Muccino
STREET: Princeton
STREET: Princeton
STREET: Rev Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 58.8%; Score 457; DB 4; Length 88; 98.8%; Pred. No. 5.8e-37; tive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                       STATE: WEW TOTK
COUNTRY: USA
LIF: 10036-2711
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTAME: Patent: Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION 19.7A:
APPLICATION 19.7A:
ALLING DATE: 09-SEP-1996
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 5, Application US/08425673 & Patent No. 5508261 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELERYN: (1)11469-9741/864
TELEX: (1)11466-9741/864
TELEX: (1)1468-9741/864
TELEX: (1)1468-9741/864
TELEX: (1)1488-9741/864
TENEVAL (1)1488-9741/864
TENEVAL (1)1488-9741/864
TOPOLOGY: (1)1488-9741/864
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COMPUTER READABLE FORM:
WEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATLALE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 98.88
Matches 82; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: peptide US-08-709-948-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
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3 CELTNITIAVEKEGGGFCITINTIMCAGYCYTROLVYKD--PARPKIQKTCTFKELVYET 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 29.3%; Score 228; DB 4; Length 104; Best Local Similarity 43.6%; Pred. No. 5.2e-13. Hetches 41; Conservative 17; Hismatches 32; Indels Matches 41; Conservative 17; Hismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                Query Match 29.3%; Score 228; DB 4; Length 104; Best Local Similarity 43.6%, Pred. No. 5.2e-15. Matches 41; Conservative 17; Mismatches 32; Indels Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 71.4 Application US/09282357
; Sequence 71.4 Application US/09282357
; Patert No. 6242580
; CENERAL INFORMATION IN INTERPRETATION IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
CLASSIFICATION: 536
CLASSIFICATION: 536
REGOR APPLICATION NUMBER: 06/18, 288
FILING DATE: 25 AUG-1997
APPLICATION NUMBER: 09/853,524
FILING DATE: 09-MA-1997
APPLICATION NUMBER: 08/199, 382
FILING DATE: 18-FEB-1994
ATTORNEY/AGBYT INFORMATION:
NAME: MURSANG-KEG H9
RECEISTRATION NUMBER: 29, 99
REERENCE/COCKET NUMBER: 29, 99
REERENCE/COCKET NUMBER: 29, 99
TELECOMMUNICATION INFORMATION:
TELECHONE: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
WEDUTH TIPE: DISACTED
CONFUTER: IBM COMPABLIDE
OPERATING STEPRE: DOS
OPERATING STEPRE: DOS
OFFWARE: FARSES for Windows Version 2.0
CURRENT APPLICATION NUMBER: US/09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               :|:||| :::||| 61 VRVPGCAHHADSLYTYPVATQCHCGKCDSDSTDC 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 74:
SEQUENCE CHARACTERISTICS:
LENGTH: 104 amino acids
TYPE: amino acid
STRANDEDNESS: single
           SEQUENCE CHARACTERISTICS:
; LENGTH: 104 annino acids
; TYPE: annino acid
; SYRANDENNESS: single
; TOPOLGGY: linear
US-08-918-288-74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
US-09-282-357-74
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TELEFAX: 202-887-0763
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/RE:
NAME/RE:
NAME/RE:
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NAME/RE:
NAME INFORMATION:
NAME INFORMATION:
NAME INFORMATION:
NAME INFORMATION:
NAME/RE:
NAM
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OTHER INFORMATION: /note- 'The asparagine at position
CTHER INFORMATION: 30 is linked to an oligosaccharide.
US-08-086-915-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 70006-18898
COMPUTER REALDALE FORM:
WEDIUM TYPE: IN COMPUTION
COMPUTER: IN COMPUTION
COMPUTER: IN COMPUTION
COMPUTER: IN COMPUTION
SOFTWARR: PRESISON FOR WINDOWS VETSION 2.0
CURRENT APPLICATION DATA:
APPLICATION WINBER: US/08/918,28$
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION UNIBER: 08/953,524
FILING DATE: 08/4MY-1997
APPLICATION UNIBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORING DATE: 118-FEB-1994
REGISTRATION UNIBER: 29,999
REPERENCE/DOCKET WINBER: 29,999
FELECOMUNICATION INPORT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
TELEFAX: 202-466-2006
INFORMATION FOR SED ID NO: 14
SEQUENCE CHARACTERISTICS:
LENGTH: 46 annino acids
TYPE: annino acids
TYPE: annino acid
TYPE: LINEAT
MOLECULE TYPE: protein
HYPOTHERICAL:
ORIGINAL SOURCE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 2000 Penni
CITY: Washington
STATE: DC
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
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4; Gaps

INFORMATION FOR SEQ ID NO: 74:

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Query Match 29.3%; Score 228; DB 4; Length 108; Best Local Similarity 43.6%; Pred. No. 5.4e-18. Wetches 41; Conservative 17; Wismatches 32; Indels
Sequence 73, Application US/09282357
Patent No. 5242580
CEREAL INFORMATION: GALEANING CALLANT: BOLIE, ITTING APPLICANT: NOTICE, William APPLICANT: NOTICE, William SINGLE-CHIN FORMS OF THE TITLE OF INVERTION: GALCORROTEIN HORNONE QUARTET NUMBER OF SEQUENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 84
CONTRET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington CITY: Washington CONTRES READALE PORM: CALLA CONTRES READALE PORM: CALLA CONTRES READALE PORM: MEDIUM TYPE: Diskette CONTRES READALE PORM: MEDIUM TYPE: Diskette CONTRES READALE PORM: MEDIUM STREET SASSES OF WINDOWS NOT SOFTWARE: PASSES OF WINDOWS NAT: APPLICATION NATA: APPLICATION NATA: APPLICATION NAMES: 08,7918.28
FILING DATE: 13 AMG-1937
APPLICATION NUMBER: 08,7918.28
FILING DATE: 13 PENDAL 1997
APPLICATION NUMBER: 08,791.28
APPLICATION NUMBER: 08,791.28
APPLICATION NUMBER: 08,791.28
APPLICATION NUMBER: 08,791.392
ATCORREY AND ARCHAULTON: NUMBER: 08,791.392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 66
G'06-318-218-72
G'05-318-218-72
Sequence 72, Application US/08918288
Setent No. 6218890
GENERAL INFORMATION
APPLICANT: BOIME, ILVING
APPLICANT: BOIME, ILVING
TITLE OF INVENTION: SINGLE-CIAIN FORMS OF THE
TITLE OF INVENTION: GLYCOPROTEIN HORMONE QUARTET
NUMBER OF SEQUENCES: 83
CORRESPONDENCE ADDRESS:
ADDRESSEE: WORRISON & FOEKSTER
STREET: 2000 Pennsylvania Avenue, NW, sulte 5500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Murashige, Kate H
REGISTRATION UNMER: 29,959
REFERENCE/DOCKET NUMBER: 29500-20050.25
TELECOMMULICATION INFORMATION:
TELEPRONE: 207-887-1500
TELEPRONE: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 VRVPGCAHHADSLYTYPVATQCHCGKCDSDSTDC 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 73:
SEQUENCE CHARACTERISTICS:
LENGTH: 108 amino acids
TYPE: amino acid
STRANDEDMESS: siggle
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TOPOLOGY:
US-09-282-357-73
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                                     10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQV--VCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 29.3%; Score 228; DB 4; Length 108; Best Local Smilarity 43.6%, Pred. No. S.4-13; Indels Matches, 41; Conservative 17; Mismatches 32; Indels
                                                                                                                                                                                                        RESULT 64
US-08-918-13
US-08-918-13
SEQUENCE 73. Application US/08918288
PAPER NO. 6218810:
CRREAL INFORMATION:
APPLICANT: BOIME, Irving
APPLICANT: BOIME, Irving
TITLE OF INVENTION: SINCLE, CRAIN FORMS OF THE
TITLE OF INVENTION: SINCLE, SINCHESCOMENES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 83
CITY: MASHINGTON & FORESTER
STREET: ZO00 Pennsylvania Avenue, NW, suite 5500
STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPRY: USA
COMPUTER READABLE PORM:
MEDINY TYPE: Diskette
COMPUTER: IRM Competible
COMPUTER: IRM Competible
COMPUTER: Residen for Windows Version 2.0
SOFTWARE: PRESIDEN COM
APPLICATION NUMBER: US/08/918,288
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIPCATION:
PRIOR APPLICATION DATA:
APPLICATION UNDER: 09/282,357
FILING DATE: 09-M2-1997
PRILING DATE: 09-M2-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-EBS-1994
APPRICATION NUMBER: 20,4199,382
FILING DATE: 18-EBS-1994
APPRICATION NUMBER: 29,959
REFERENCE/OCCAFT NUMBER: 29,959
TELECOMMUNICATION NUMBER: 29,959
TELECOMMUNICATION NUMBER: 29,959
TELECOMMUNICATION NUMBER: 29,959
TELECOMMUNICATION NUMBER: 20,959
TELECOMMUNICATION NUMBER: 20,959
TELECOMMUNICATION NUMBER: 20,959
TELECOMMUNICATION NUMBER: 20,959
                                                                                                                                          68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
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                                                                                                                                                                            61 VRVPGCAHHADSLYTYPVATQCHCGKCDSDSTDC 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SED ID NO: 73: SEQUENCE CHRANCTERISTICS: LENGTH: 108 amino acids TYPE: amino acid STRANDEDNESS: single TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TOPOLOGY:
US-08-918-288-73
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US-09-282-357-73
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08/918,288

Washington

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THILE OF INVESTIGATION.

REPLICANT: CAMPDELIT RODGET K.

APPLICANT: CAMPDELIT RODGET K.

APPLICANT: CAMPDELIT RODGET K.

TITLE OF INVESTION: Analogs of Glycoprotein Hormones Having

TITLE OF INVESTION: Altered Receptor Binding Specificity and Activity and

TITLE OF INVESTION: Hetcods For Preparing and Using Same

TITLE OF INVESTION: Hetcods For Preparing and Using Same

CORRESPONDENCE ADDRESS:

STREET: P. O. BOX 1267

CITT: P. Inceton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 CELINITIAVEKEGGGFCITINITWGAGYCYTRDLVYKD--PARPKIQKTCTFKELVYET 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQV -- VCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 29.31; Score 228; DB 4; Length 111; Best Local Similarity 41.64; Pred, No. 5.6e-15; Matches 41; Conservative 17; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: New Jersey
COUNTRY: 058-51
LOWING DISTANDER FORM:
COMPUTER READABLE FORM:
KEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPALIAL
OFBRATING SYSTEM: PC COG, MG-TOGS
SOFTWARE: PETENTIN Release #1.0, Version #1.25
SOFTWARE: APPLICATION DATA:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                         NAME: Murashige, Kate H
EEGISTRATION UNDERS: 29,959
REFERENCE/OCKET NUMBER: 29500-20050.25
FELECOMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
TELEPHONE: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Muccino, Richard R.
REGISTRATION NUMBER: 32,538
REFERENCE/DOCKET NUMBER: UMD 1.0-004
TELECOMMUNICATION INFORMATION:
FILING DATE: 25 AUG-1997
APPLIANTON UNGER:
FILING DATE: 09-NAX-1997
APPLIANTON UNGER: 08/199, 382
FILING DATE: 18-FEB-1994
ATTORNEY/AGERI INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/11/151
FILING DATE: 18-UN-1991
ATYONREY/AGERT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/08425673
Patent No. 5508261
                                                                                                                                                                                                                                                                                                                                                                                                                            INPORANTION FOR SEQ ID NO: 72
SEQUENCE CHARACTERISTICS:
LENGTH: 111 amino acids
TIPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-282-357-72
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 29.3%; Score 228; DB 4; Length 111; Best Local Shallarity 43:0%, Pred. No. 5.6-15. Hatches 4; Conservative 17; Wismatches 33; Indels Matches
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        WEDITH TYPE: Diskette
COMPUTER: IN COMPALIDLE
OPERATING SYSTEM: DOS
SOFTWARE: ESSISED for Windows Version 2.0
CURRENT APPLICATION NUMBER: US/08/918,288
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: MUTABAJAG, KALE H9
RECISTRATION WINDER: 29,959
REFERENCE/OCCET UNMERS: 29,500-20050.25
TELECOMMUNICATION INFORMATION:
TELEFRONE: 202-887-1500
TELEFRA: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
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APPLICATION NUMBER: 09-MAY-1997
FILING DATE: 09-MAY-1997
FILING DATE: 18-FEB-1994
TORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                 TOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: 72: SEQUENCE CHARACYPERSTICS: LENGTH: 111 amino acids TYPE: amino acid STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TOPOLOGY:
US-08-918-288-72
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21 CELTNITIAIEKEECRFCISINTTWCAGYCYTRDLVYKD--PARPKIQKTCTFKELVYET 78
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 28.51, Score 222; DB 4; Length 223; Best Local Smilarity 37.34, Pred. No. 4.6-H. Watches 44; Conservative 19; Mismatches 51; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMERAL INFORMATION:
APPLICANT: BOINE, Irving
APPLICANT: BOINE, Milliam R.
THILE OF INVENTION: SINGLE-CHAIN FORMS OF THE
TITLE OF INVENTION: GLYCOPROTEIN HORMONE QUARTET
NUMBER OF SEQUENCES: 83
CONGESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FORRSTER
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: AUGU PERINSY, VARIAR AVERUE, FW, SULLE STATE: LOC COUNTRY: USA ZIP: 2006-1808 COMPUTER READABLE FORM: READING TO STREET FOR STREET STATES OF STATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
CLASSIFICATION: 536
PRIOR APPLICATION DATE:
PRIOR APPLICATION NUMBER: 08/318,288
FILING DATE: 25 AGG-1997
APPLICATION WINGER: 08/199,382
FILING DATE: 09-4AY-1997
APPLICATION WINGER: 08/199,382
FILING DATE: 18-FEB-1394
ATTORNEY AGENT WINDOMATION:
NAME: NUMBER: 29,959
REFERENCE/DOCKET WINGER: 29,959
FELECOMMUNICATION: TRELEPHONE: 205-0206-2050,25
TELECOMMUNICATION: TRELEPHONE: 205-887-1500
TELEFRANE: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 70
209-282-357-27
: Sequence 27, Application US/09282357
: Patent No. 6242580
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SEQUENCE CHARACTERISTICS:
LENGTH: 223 analno acids
TYPE: anino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
; FRAGMENT TYPE: internal US-08-918-288-27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 27, Application US/08918288
Sequence 27, Application US/08918288
Sequence 27, Application US/08918288
SERENT NO. 6238890
GERENT INCOMENTION:
APPLICANT: BOUKE, William R.
TITLE OF INVENTION: SINGLE-CHAIN FORMS OF THE
TITLE OF INVENTION: GLUCOPOTEIN HORMONE QUARTET
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FORESTER
STREET: 2000 Pennsylvania Avenue, NM, suite 5500
COUPTRY: USA
COUPTRY: USA
COMPUTER REGNABLE FORM:
MEDINI TYPE: DISRECTE:
COMPUTER: INA COMMENTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66 ESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
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OPERATING SYSTEM: DOS
SOFTWARE: PRASEED for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/918,288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60 RTVEIPQCPLHVAPYFSYPVALSCRCGRCDTDYSDC 95
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REGISTRANDN WIMBER: 29,959
REFERENCE/DOCKET NÜMBER: 29500-20050.25
FELECOMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
TELEPHONE: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASTERGATION
CLASTERGATION
PRIOR APPLICATION NUMBER:
09/282,357
FILING DATE:
APPLICATION NUMBER:
08/653,524
FILING DATE:
APPLICATION NUMBER:
08/653,524
FILING DATE:
RELING D
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INPORATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
LENGTH 223 anino acids
TYPE: anino acid
STRANDEDNESS: single
                                                                                    INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 112 amino acidd
TYPE: amino acidd
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                    HYPOTHETICAL: NO HYPOTHETICAL: NO HYPOTHETICAL: NO US-08-425-673-6
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10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQV - · VCNYRDVRFES 67
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 28.1%; Score 218; DB 4; Length 229; Best Local Similarity 36.5%; Pred. No. 1.1e-1; Matches 42; Conservative 21; Wismatches 46; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 73
105-09-282
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                                                                                                 COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARES: FastSED for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: THE COMPACTIBLE
OPERATING SYSTEM: DOS
SOFTWARE: FRSIESE TO THINDOWS VERSION 2.0
CURRENT APPLICATION NATION: (S/09/282,357
APPLICATION NUMBER: US/09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29,959
ER: 29500-20050.25
                                                                                                                                                                                                               APPLICATION NUMBER: US/08/918,288 FILING DATE:
                                                                                                                                                                                                                                                                                       CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
PLITING DATE:
APPLICATION NUMBER: 08/853,524
PLITING DATE: 09-4MY-1997
APPLICATION NUMBER: 08/199,382
ATTIONER'/AGENT, INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: WILLSBALGE KECE H
REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 2950
TELECOMMUNICATION HORMATION:
TELECHRONE: 202-887 1500
TELEFAX: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHRACKTERISTICS:
LENGTH: 219 amino acids
TYPE: amino acid
STRANNEDENESS: single
TOPOLOCY: linear
NOLECULE TYPE: protein
FRACKERT TYPE: internal
US-08-918-288-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 2000b-1000
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
ZIP: 20006-1888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŏ
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21 CELTNITIAIEKEECRFCISINTTWCAGYCYTRDLVYKD--PARPKIGKTCTFKELVYET 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                           68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAP 125
                                                                                                              Sequence 12, Application US/08086915
Patent No. 5444ION
REBRAL INFORMATION
REBRAL INFORMATION
FAPLICANT: Petterson, Kim SI
TITLE OF INVENTION: Variant Lutelnizing Hormone Encoding DNA
TOTRESPONDER DIDERS:
CORRESPONDER Adduct, Mastriant, Schaumberg & Schill
STREET: 1140 Connecticut Avenue, N.W., Suite 250
CITY: Washington
COUNTRY: D.C.
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oubry Match 28.4%; Score 221; DB 1; Length 46; Best Local Similarity 95.1%; Pred. No. 9.6e-15; Indels Matches 39; Conservative 1; Mismatches 11: Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jos-U8-918-288-12
Sequence 12, Application US/08918288
Fatent No. 62388901
GENEAL INFORMATION:
APPLICANT: BOTHE INVING
TITLE OF INVENTION: GINCLE-CHAIN FORMS OF THE
TITLE OF INVENTION: GINCLE-CHAIN FORMORE QUARRET
CORRESPONDENCE ADDRESS:
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington
STATE: DC
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ILE: 20036
COMPUTER READABLE FORM:
KEDIUM TYPE: Floppy disk
KEDIUM TYPE: Floppy disk
KEDIUM TYPE: Floppy disk
KEDIUM TYPE: Floppy disk
COMPUTER: IN PROCEED TO THE STATEM
COMPUTER: PARENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLEAST FLANLINGS 330

CLEAST FLANLINGS

NAME: KUDOVICK, ROAD 43.

REFERENCE/TOX NUMBER: 25 401

REFERENCE/TOX NUMBER: 15873005

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/086,915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELERAK: 202-466-2006
INFORMATION ROR ESD ID NO: 12
SEQUENCE CHERACTERISTICS:
LENTH: 46 main acids
TYPE: mains acids
TYPE: mains acid
TYPE: protein
ORIGINAL SORRES:
ORIGINAL SORRES:
URKNISM: Amon saplens
US-08-085-315-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 07 CLASSIFICATION:
                                                                                                                                                                                                                        RESULT 71
US-08-086-915-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      οy
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10 CRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLOGYLPALPOV--VCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 27.9%; Score 217; DB 4; Length 222; Best Local Similarity 37.3%; Pred. No. 1.4e-13; Marches 44; Conservative 19; Wismatches 47; Indel9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
21F: 2006-188
21F: 2006-188
COMPUTER READALE PORN:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFWHARE: REASIESD for Windows Version 2.0
CURRENT APPLICATION NUMBER: US/09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSICATION: 536
PRIOR APPLICATION DATA
APPLICATION DATA
APPLICATION UNBER: 08/918,288
FILING DATE: 25 AG-1997
APPLICATION NUBER: 08/53,524
FILING DATE: 09-MAY-1997
APPLICATION NUBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORIEY/ACETT RIPORATION:
NAME: MITSABLIGG, KALE H
REGISTRATION WUMBER: 29,959
REFERENCE/DOCKET NUMBER: 29,959
TELECOMMULICATION INFORMATION:
                                                                 29500-20050.25
NAME: Wursshige, Kate H
REGISTRATION WUMBER: 29,959
REPERENCE/DOCKET WUMBER: 2950
RELCOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELERAX: 202-887-1500
                                                                                                                                                                                                                      INPORANTION FOR SEQ ID NO: 30:
SEQUENCE CHRANCTERISTICS:
TIPE: anino acid
TIPE: Intent
NCECULE TIPE: procein
FRANKEN TIPE: internal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSS 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 28.1%; Score 218; DB 4; Length 229 Best Local Similarity 16.5%; Pred. No. 1.1e-13; Matches 42; Conservative 21; Mismatches 48; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: BOINE, Irving
APPLICANT: BOINE, Irving
APPLICANT: WOULE, WILLIAM R.
TITLE OF INVENTION: GLYCOPROTEIN HORMONE GUARTET
TITLES OF INVENTION: GLYCOPROTEIN HORMONE GUARTET
TORRESPONDENCE: 83
CORRESPONDENCE: ADDRESS:
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITT: Washington
STATE: Machington
                                                                                   FILING DATE: 25 AUG-1997
APPLICATION WIGHER: 08,833,524
FILING DATE: 09-MAY-1997
FILING DATE: 09-MAY-1997
FILING DATE: 18-FEB-1994
ATTORREY AGENT IRFORMATION:
NAME: MUTABALIAG, KERE H
REGISTRATION NUMBER: 29,559
REFERENCE/DOCKET NUMBER: 29,550-20050.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: THE COMPETIBLE
OPERATING SYSTEM: DOS TO WINDOWS VERSION 2.0
CURRENT APPLICATION NAMES: US/08/918,288
APPLICATION NUMBER: US/08/918,288
                     25 AUG-1997
1888 - 1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 30, Application US/08918288 Patent No. 6238890 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/853,524
FILING DATE: 09-MAY-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELECHANICATION INFORMATION:
TELECHANICATION INFORMATION:
TELECHANICATION OF 12:
SEQUENCE CHARACTERISTICS:
ENGRYFT 279 annion acids
TYPE: annion acids
TY
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ZIP: 20006-1888
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
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Sequence 4. Application US/08425673
Sequence 4. Application US/08425673
Fatent No. 5508261
GENERAL INFORMATION:
APPLICANT: CAMPBELL, ROBERT K.
APPLICANT: CAMPBELL, ROBERT K.
TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and TITLE OF INVERTION: Altered Receptor Binding Same CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
STREET P. O. Box 1567
CORPOTER: New Jersey
COMPATE: US New Jersey
COMPATE: The PROPER COMPATE: PLOPEY ALS CONTROLL SPECIAL CONTROLLS FORM:
MCDIUM TYPE: Floppy disk
COMPUTER READALE FORM:
COMPUTER FORM:
COM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQV--VCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 27.5%; Score 214; DB 1; Length 111; Best Local Smilarity 40.4%; Pred. No. 1.2e-13; Matches 39; Conservative 19; Mismatches 33; Indels Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 VRVPGCAHHADSLYTYPVALQCHCGKCDSDSTDC 94
    APPLICATION NUMBER: US/08/425,673
FILING DATE:
CLASSIFICATION: 514
PRICA APPLICATION S14
APPLICATION NUMBER: US 07/11/151
FILIG DATE: 18 - JUN-1991
ATTORNET/ACERT INFORMATION:
NAME: MUCCLIO, RICCAR OF RESERVENCE/DOCKET NUMBER: UPD 1.0-004
TELECOMMUTATION INTORRATION:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 514

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/717,151

FILING DATE: 18-70W-1991
ATTORNEY/AGENT TREOGANTION:
NAME: WOCCION FINITARY
REGISTRATION NUMBER: 27,538
REFERENCE/DACKET WHORER: 100 1.0-004
TELECOMENICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9) 466-34
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HYPOTHETICAL: NO
ANTI-SENSE: NO
US-08-425-673-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 78
US-08-425-673-4
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                                                                                                                                                                                                                                                                                                                                                                       68 IRLPGCPRCWRPVSYAVALSCOCALCRRSTTDCGGPRDHPLTCDDPREQDSSSSRAP 125
79 VRPGCAHHADSLTTVANQCHCGCCDSSTCCTVRGLGFSYG----SGGSGSP 132
                                                                                                                                                                                                                                                 Onery Match 27.9%; Score 217; DB 4; Length 222; Best Local Similarity 37.3%; Pred. No. 1.4e-13, Indels Matches 47; Conservative 19; Hismatches 47; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 27.7%; Score 215; DB 6; Length 45; Best Local Similarity 95.0%; Pred. No. 3.5e+14; Matches 38; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patonic No. 5451527
Patonic No. 5451527
Patonic No. 5451527
Patonic No. 5451527
Putte of Invention: HGG Pertides for USE in Antibody Profession of Secure Secures: A Control of Secure Secures: A Patical Of Secures: 30-3AA-1991
PRIOR APPLICATION NUMBER: 375,731
PATICALION NUMBER: 375,731
PATICALING DATE: 10-UUL-1989
PATICALING DATE: 20-UUL-1989
PATICALING DATE: 20-UUL-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 222 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein FRAGMENT TYPE: internal US-09-282-357-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO:1:
; LENGTH: 45
5451527-1
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TITLE OF INTERVALION:

PRELICATION:

TITLE OF INVENTION: Variant Lutelnizing Hormone Encoding DNA NUMBE NO ENGESPONDENCES: 17

CORRESPONDENCES: 17

CORRESPONDENCES: 17

CORRESPONDENCES: 16

CITY: MASHINGTON

CITY: MASHINGTON

COUNTRY: 0.S.A.

IN: 20036 ASHINGTON

COUNTRY: 0.S.A.

COMPUTER RELABLE FORM:

KEDIUM TYPE: Floppy disk

COMPUTER RELABLE FORM:

KEDIUM TYPE: RICHARD DATA:

COMPUTER RELABLE FORM:

KEDIUM TYPE: RICHARD DATA:

COMPUTER THE OF COMPANION: 356

CLASSIFICATION: 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 81
5177133-3
FAREL NO. 5177193
FACERIC NO. 5177193
FACERIC NO. 5177193
FACERIC NO. 5177194
FILLIGORIUS CONHIS OF REPRODUCTIVE HORMONES
CURRENT APPLICATION HOMER: US/07/532,254
FILLIGORION KUNDER: US/07/532,254
FILLIGORION KUNDER: US/07/532,254
FILLIGORION KUNDER: 313,646
FILLIGORION KUNDER: 313,646
FILLIGORION KUNDER: 313,646
FILLIGORION FILLIGORION FILLIGORION KUNDER: 131,646
FILLIGORION FILLIGORION KUNDER: 131,646
FILLIGORION FILLIGORION KUNDER: US/07/193-3
FILLIGORION FILLIGORION KUNDER: US/07/193-3
FILLIGORION FILLIGORION KUNDER: US/07/193-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 26.6%; Score 207; DB 1; Length 46; Best Local Similarity 90.3%; Pred. No. 2.1e-13; Indels Matches 77; Conservative 1; Mismatches 3; Indels
                                                                                                                            6 SREPLRPWCHPINAILAVEKEGCPVCITVNTTICAGYCPTM 46
                                                                     2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM 42
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S-04-080 - 916 - 915 - 13

S-04-080 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 916 - 
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NAME: KORDAÍJ J.
REGISTRATION NUMBER: 25.401
REFERENCY/OCKET NUMBER: 1587;
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELERAM: 202-466-2006
INDOMATION POR SED ID NO: 13
SEQUENCE CHARACTERISTICS:
LENGTH: 46 amino acid
TYPE: amino acid
TOPOLOGI: linear
MOLECOLE TYPE: protein
HYPOTHETICAL: NO
ORGANISM: NOO ORGANISM: NOO ORGANISM: NOO SEQUEN
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Sequence 11. Application US/08086915
Barber No. 5444167
GENERAL INFORMATION:
APPLICAMT: Pettersson, Kim SI
TITLE OF INVENTION: Vorlant Luteinizing Hormone Encoding DNA NUMBER OF SEQUENCES: 17
CORRESPONDESSES:
ADDRESSES: Adduct, Mastriant, Schaumberg & Schill
STREET: 1140 Connecticut Avenue, N.W., Suite 250
CITT: Mashington
STREE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 27.5%; Score 214; DB 1; Length 111; Best Local Similarity 40.4%; Pred. No. 1.2e-13; Indels Matches 38; Conservative 19; Mismatches 33; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         duery Match 26.6%; Score 207; DB 1; Length 46; Best Local Smillarity 90.2%; Pred, No. 2.1e-13; Matches 37; Conservative 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCATION: 30
OTHER INFORMATION: /note- 'The asparagine at position 'THER INFORMATION: 30 is linked to an oligosaccharide. US-08-086-915-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: 10.5.

STATE: 10.5.

CONDURTY: 0.5.A.

CONFOURE: RADABLE FORM:
MUDIDINATIVE: RADABLE FORM:
MUDIONATIVE: RADABLE FORM:
MUDI
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INFORMATION FOR SED ID NO: 4:
SEQUENCE CHARACTERISTICS:
TEPE: anino acid
TEPE: anino acid
TOFOLOGY: linear
NOLECULE TIPE: peptide
HTPOTHETICAL: NO
US-08-425-673-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: Modified-site
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TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
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APPLICANT: Bryant Joseph
APPLICANT: Lunardi-Itskandar, Yanto
TITLE OF INVENTION: METHODS OF PROMOTING HEMATOPOIESIS
TITLE OF INVENTION: USING DERIVATIVES OF HUMAN CHORIONIC GONADOTROPIN
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
IIILE OF INVENTION: Variant Luteinizing Hormone Encoding DNA NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 23.0%; Score 179; DB 1; Length 41; Best Local Similarity 75.6%; Pred. No. 8.7e-11; Matches 31; Conservative 4; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTHER INFORMATION: /note- "The asparagine at position OTHER INFORMATION: 13 is linked to an oligosaccharide. US-08-08-915-15
                                            CORRESPONDENCES:
ADDRESSE: Adduct, Mastriani, Schaumberg & Schill
STREET: 1140 Connecticut Avenue, N.W., Suite 250
CITY: Washington
STATE: D. COUNTRY: U.S.A.
ZIATE: P. 2006
COUNTRY: U.S.A.
ZIATE: P. 2006
COMPUTE: REDABLE FORM:
MEDIUM TIPE: PLOPPy disk
CORPUTE: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release 11.0, Version 11.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
COUNTRY: USA
ZIP: 10036-2711
COMPUTER: READABLE FORM:
WEDIUM TYPE: Floppy disk
COMPUTER: TBM PC COMPALIA
COMPUTER: PREADABLE FORM:
WEDIUM TYPE: PROPPY disk
COMPUTER: PREADABLE FORM:
COMPUTER: PREADABLE FORM:
COMPUTER: PREADABLE FORM:
COMPUTER: PREADABLE FORM:
APPLICATION NUMBER: US/08/709,924
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER: US/08/086,915
: 07-JUL-1993
ION: 536
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patent No. 596813
GRERAL INFORMATION: APPLICANT: GAILO, APPLICANT: GAILO, APPLICANT: GAILO, ADSENT G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            EYAGENT INFORMATION:
E Rubovcik, Ronald J.
STRATION UNBER: 25,401
MCWINCEATION INPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 41 amino acids
TYPE: amino acid
TOPOLGGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: Modified-site
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                                                                                                                                 21 CELINITIAIEKEBCRFCISINITCWCZGYCYTRDLVYKD--PARPKIQKTCTFKELVYE 78
                                                                                               10 CRPINATLAVEREGCPVCITVNTTI-CAGYCPTMTRVLQGVLPALPQV---VCNYRDVRFE 66
                                                                                                                                                                                                                                                                                                         RESULT 82
US-08-086-915-17
Sequence 17, Application US/08086915
Fatter No. 544167
CARREAL INFORMATION
TITLE OF INVENTION: Variant Luteinizing Hormone Encoding DNA
TITLE OF INVENTION: Variant Luteinizing Hormone Encoding DNA
NUMBER OF SOURNES: 11
CORRESPONDENCE ADDRESS:
CONDESSES: Adduct, Mastriani, Schaumberg & Schill
STREET: 1140 Connecticut Avenue, N.W., Suite 250
COUPER: D.C.
COUPER: D.C.
LITT: Machington
COUPER: D.C.
LITT: WALABLE FORM:
LITT: WALABLE FORM:
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Ouery Match 24.8%; Score 193; DB 6; Length 131; Best Local Smilarity 39.6%; Pred. No. 1.5-1; Matches 38; Conservative 18; Mismatches 34; Indels
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OCCATION: 13
OCCHER INFORMATION: /note- "The apparagine at position
OTHER INFORMATION: 13 is linked to an oligosaccharide.
05-08-06-515-17
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COMPUTER READABLE FORM:

REDIGH TYPE: PLOPPY disk
COMPUTER: TEM PC COMPATABLE
COMPUTER: TEM PC COMPATABLE
COMPUTER: TEM PC COMPATABLE
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/086,915
FILING DATE: 07-7UL-193
ATTORNEY/AGENT INFORMATION:
NAME: KADAVCIA, ROMAID J
REGISTRATION WUMBER: 25,401
RECECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 SRGPLRPLCRPINATLAVEKEACPVCITFTTSICAGYCPTM 41
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                                                                                                                                                                                                                                        79 TVRVPGCAHHADSLYTYPVATQCHCGKCDSDSTCDC 114
                                                                                                                                                                                                  67 SIRLPGCPRGVNPVVSYAVALSCQCALC-RRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Pettersson, Kim SI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEGRAT. 202-467-6300
INFORMATION FOR SED ID NO: 1
EDUCHTE, 102-467-0006
INFORMATION FOR SED ID NO: 1
EDUCHTE, 11 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: alinear
MOLECULE TYPE: protein
HYPOTHERICAL: NO
FRAURE:
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GUERGEAL INFORMATION:
APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Robert C.
APPLICANT: Byant, Joseph
TITLE OF INVENTION: ETATHKHY AND PREVENTION OF HIV INFECTION
TITLE OF INVENTION: ETATHKHY AND PREVENTION OF BUNNAN CHORIONIC GONADOT
TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOT
TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOT
TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOT
TORRESPONDENCE ADDRESS:
ADDRESSED: ADDRESS:
ADDRESSED: ADDRESS:
ANDRESSED: ADDRESS:
ANDRESSED: ADDRESS:
ADDRESSED: AD
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                                                                                               1 TCDDPRFQDSSSSRAPPPSLPSPSRLPGPSDT 32
                                                                                                                                                                                                                                                      RESULT 86
US-08-709-948-25
Sequence 25, Application US/08709948
Fatest No. 6319504
SEREAL INFORMATION
APPLICANT: Gallo, Robert C.
APPLICANT: Bryant, Joseph
APPLICANT: Bryant, Joseph
APPLICANT: Lunardi-Iskandar, Yanto.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 87
185-08-086-915-16
; Sequence 16, Application US/08086915
; Patent No. 5444167
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TELERY 6614 PENNIE
TELERY 6614 PENNIE
TEROGRAPIO POS SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
TENCH! 37 anino acids
TYPE: anino acid
TYPE: anino acid
MOLECULE TIPE: peptide
US-08-709-948-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICAM: Bryant, Joseph
APPLICAM: Lunardi-Istandar, Fanto
TITLE OF INVENTION: TREATHENT AND PREVENTION OF CANCER BY
TITLE OF INVENTION: ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROPIN
WORDER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS: ADDRESS: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
CITT: New York
COUNTRY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
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COMPUTER: USA
TET: 1005-711
COMPUTER: ELOPH GIA
KENDIM TYPE: FLOPPY disk
COMPUTER: IN PC COMPUTER:
COMPUTER:
COMPUTER: IN PC COMPUTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 22.5%; Score 175; DB 2; Best Local Similarity 100.0%; Pred. No. 1.9e-10; Matches 32; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
22.5%: Score 175; DB 2;
Best Local Similarity 100.0%; Pred. No. 1.99-10;
Marches 32; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               110 TCDDPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 TCDDPREQDSSSSRAPPSLPSPSRLPGPSDT 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 85
35-08-708-925-25
Sequence 25, Application US/08709925
Parent No. 5997871
FILING DATE: 09-SEP-1996
CLASSIFICATION: 514
TORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 37 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; MOLECULE TYPE: peptide US-08-709-924-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
TYPE/CAT: linear
MOLECULE TYPE: peptide
US-08-709-925-25
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APPLICANT: Russell, J.R.
APPLICANT: TRUE, V.T.
TILLE OF INVENTION: Genetically Engineered Enzymes And Their
TILLE OF ENGINEERS: 34 Conjugates For Diagnostic Assays
CONFESSONDENCES: 34 Conjugates For Engineered Enzymes
STREET: Gene Albort Park Road
CITY: Abbort Park Road
CONFITE: USA
CONFITE: 110 No.
CONFITE: NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 19.91; Score 155; DB 2; Length 39; Best Local Similarity 100.04; Pred. No. 1.6-08; Matches 29; Conservative 0; Mismatches 0; Indels
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APPLICANT MAGGEL, G.A.
APPLICANT MAGGEL, G.A.
APPLICANT MASCH, S.C.
APPLICANT NASCH, J.R.
APPLICANT NASCH, J.R.
APPLICANT ON STATE OF APPLICANT STATE OF APPLICANT STATE OF APPLICANT LABORATORIES
STREET ONE ANDOTT LABORATORIES
STREET: ONE ANDOTT PARK ROAD
CITT: ABDOLT PARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNDER: 08,100,708
FILMS DATE: UNIV. 39, 1993
ATTORNEY/AGBNT INFORMATION:
RAME: WOOF, WEAN RAIDS
REGISTRATION UNDER: 33,561
REFERENCE/POCKET WOMBRE: 33,561
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            113 DPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
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INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 39 amino acid residues
TYPE: amino acid
STRANDENESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION
TELEPHONE: (708) 938-3517
TELEFAX: (708) 938-2623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: unknown
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
GRGANISM:
US-08-657-392-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 90
PCT-US94-02539-29
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TITLE OF INVENTION: HCG PEPTIDES FOR USE IN ANTIBODY
PURIFICATION PROCESSURES: 14
CURRENT APPLICATION NATA:
APPLICATION NUMBER: 05/00/647,893
FILING DATE: 30-JAN-1991
FRING APPLICATION NUMBER: 75,731
FRING DATE: 10-JUL-1989
APPLICATION NUMBER: 275,731
FRING DATE: 20-JUL-1988
COMPUTER READABLE FORM:

KINDION TYPE: Floppy disk
COMPUTER: INN FC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
COPPATING SYSTEM: PC-DOS/MS-DOS
COPPATING SYSTEM: PC-DOS/MS-DOS
COPPATING STATEM: PATEMET NELOSE 11.0, Version 11.25
COPPATING STATEME NELOSE 11.0, Version 11.25
APPLICATION NUMBER: US/08/086,915
CLASSIFTCATION: 316
ATTORNET/ACENT INFORMATION:
REGISTRATION NUMBER: 12,401
REGISTRATION NUMBER: 12,401
REGISTRATION NUMBER: 12,401
RELEPRATION SOU-16: 10.16:
CREEPRATION SOU-16: 10.16:
CREEPRATION SOU-10: 16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.16: 10.
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US-08-657-392-39
US-08-657-392-39
Sequence 29, Application US/08657392
Patent No. 5843634
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;SEQ ID NO:4:
; LENGTH: 34
5451527-4
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1; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 17.4; Score 15.5; DB 6; Length 41; Best Local Similarity 93.1%; Pred. No. 1.2e-06; Matches 27; Conservative 9; Mismatches 1; Indels Matches 27; Conservative 9; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                               Length 39;
                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 221.687

PRICEATION NUMBER: 221.687

PRILICATION NUMBER: 320.5731

PLILNG DATE: 30.7731

PRILICATION NUMBER: 221.687

PLILNG DATE: 30.7731

APPLICATION NUMBER: 221.687

APPLICATION NUMBER: 221.687

APPLICATION NUMBER: 221.687

APPLICATION NUMBER: 221.687

SELING DATE: 20.701.1988

APPLICATION NUMBER: 221.687

SELING DATE: 20.701.1988
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545127-9
; ARLENDER, SASSZZ,
PRENDER, C. S451527
; APPLICANT: SARIA, VIRENDER K.; BODNER, JOHN B.;
TILLE OF INVENTION: HGC PEPTIDES FOR USE IN ANYIBOOY
; PURIFICATION PROCEDURES
; CURRENT PAPLICATION DATA:
; PLING DATE: 30-3NN-1991
; RELING DATE: 30-3NN-1991
; APPLICATION NUMBER: 325,731
; PLING DATE: 10-JUL-1999
; RELING DATE: 10-JUL-1999
; SEQ 1D NO:9: DATE: 10-JUL-1999
; SEQ 1D NO:9: LENGTH: 41
                                                                                                                                                                                                                                                                                            Query Match 19.9%; .Score 155; DB 6; 1
Best Local Similarity 100.0%; Pred. No. 1.6e-08;
Matches 29; Conservative 0; Mismatches 0;
PURIFICATION PROCEDURES

NUMBER OF SEQUENCESS: 14

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/647,893

FILING DATE: 30-3N4-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 375,731

FILING DATE: 10-7UL-1989

APPLICATION NUMBER: 221,687

FILING DATE: 20-JUL-1989

SEQ ID NO:12:
                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 36
5451527-6
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5451527-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 39;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 91
2451527
PARENCE NO. 5451527
REGUL NO. 5451527
REGULGART: SARIN, VIRENDER K.; BODNER, JOHN B.
TITLE OF LINENTION: HCG PEPTIDES FOR USE IN ANTIBODY
NUMBER OF SEQUENCES: 14
CURRENT APPLICATION DATA:
APPLICATION WUNDER: 05/07/647,893
FILING DATE: 30-3A4-1991
FILING APPLICATION WHEBE: 75,731
FILING DATE: 10-3UL-1999
FILING DATE: 20-3UL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S451577-92
;PATEGE NO. 5451527
A RPLICANT: SARIN, VIRENDER K.;BODNER, JOHN B.
; TITLE OF INVENTION: HCG PEPTIDES FOR USE IN ANTIBODY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 19.9%; Score 155; DB 6; )
Best Local Similarity 100.0%; Pred. No. 1.6e-08;
Matches 29; Conservative 0; Mismatches 0;
                                                            COMGUTER READABLE PORM:
WEDINN TIPE: FORPPY disk
COMPUTER: IBN PC COMPACTIBLE
COMPUTER: SEN PC-DOS/MS-DOS
SOFTWARE: SOFTWA
APPLICATION DATA:
CLASSIFICATION:
                                                                                                                                                                                                                                              ATTORNOIT MEDORATION:
NAME: WOOG WEAR KING
REGISTRATION NUMBER: 33,561
REFERENCE/MOCKER UNMBER: 524, PC.01
TELECOMMUNICATION INPORMATION
TELECOMMUNICATION 18PORMATION
TELEFERENCE: (708) 938-2623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       113 DPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX:
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 39 amino acid residues
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDENESS:
TOPOLOGY: UNKNOWN
MOLECULE TYPE: Peptide
ORGANISM:
ORGANISM:
PCT-US94-02539-29
     STATE: Illinois
COUNTRY: USA
ZIP: 60064-3500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;SEQ ID NO:8:
; LENGTH: 39
5451527-8
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1; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
16.44; Score 127.5; DB 6; Length 41;
Best Local Similarity 79.34; Pred. No. 7,2e-06;
Watches 23; Conservative 4; Mismatches 1; Indels 1
                                                                                                                                                                                                                                                                               Query Match
16.41; Score 127.5; DB 6; Length 36; Best Local Similarity 79:31; Pred. No. 6,2e-06, Adviction 21; Conservative 4; Mismarches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
16.48; Score 127.5; DB 6; Length 41;
Best Local Similarity 79.38; Pred. No. 7.2e-06.
Hatches 23; Conservative 4; Mismarches 1; Indels
Matches 25; Conservative 4; Mismarches 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 98
545157-13
PACELICATION SASSAN, VIRENDER K.; BODNER, JOHN B.
PRILICATION RACEDIONES
CURRENT ARALICATION AND RECEDIONES
CURRENT APPLICATION AND RESULT ON A PACEDICATION AND RESULT OF A PACED A PA
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$451527-4
; PALCEL NO. 5451527
APPLICATION: SARIN, VIRENDER K.; BODNER, JOHN B.
TITLE OF INVENTION: HCG PETIDES FOR USE IN ANTIBODY
PURIFICATION HOCEDURES
UNHERR OF SEQUENCES: 14
CURRENT APPLICATION DATA:
PRIOR PAPLICATION WUMBER: 30-JAH-1991
PRIOR PAPLICATION WUMBER: 35-31
FILING DATE: 30-JAH-1991
FILING DATE: 30-JAH-1991
FILING DATE: 20-JUL-1989
FILING DATE: 20-JUL-1989
FILING DATE: 20-JUL-1988
FILING DATE: 20-JUL-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      113 DPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
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; FILING DATE: 10-JUL-1999
; APPLICATION NUMBER: 20-316.7
; SEQ ID NO:3: LENGTH: 36
541527-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5451527-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels 1; Gaps
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Best Local Similarity 93.11; Pred. 4b. 1.2e-06.

Best Zi, Conservative 0; Mismatches 1; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match
17.41; Score 135.5; DB 6; Length 41;
Best Local Similarity 93.11; Pred. No. 1.2e-06;
Makethes 77; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                             SALISTION S451527
PROBLEM NO. 5451527
PROBLEM SALISON
PROBLEM SALISON
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PROBLEM SALISON
PROBLEM SEQUENCES: 14
CURRENT PAPLICATION DATA:
PELLATON NUMBER: US/07/647,893
PELLATON NUMBER: US/07/647,893
PELLATON NUMBER: 1375,731
PELLATON NUMBER: 1375,731
PELLATON NUMBER: 221,687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 96
545157-11
FACENT SARIN, VIRENDER K.; BODNER, JOHN B.
TITLE OF INVENTION: HGG PEPTIDES FOR USE IN ANTIBODY
FOURFELCATION PROCEDURES: 14
CURRENT APPLICATION DATA:
ROWERP APPLICATION DATA:
RAPLICATION DATA:
FILING DATE: 30-5AW-1991
FILING DATE: 10-JUL-1989
FILING DATE: 21-637
FILING DATE: 21-67-101-1989
FILING DATE: 22-5UL-1989
FILING DATE: 20-JUL-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 97
5451527-5
1451527-5
19ELGER NO. 5451527
APPLICANT: SARIN, VIRENDER K.; BODNER, JOHN B.
TITLE OF INVENTION: HGG PEPTIDES FOR USE IN ANTIBODY
1-PURICATION PROCEDURES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   113 DPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 DPRFQD-SSSKAPPPSLPSPSRLPGPPDT 33
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/647,893
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO:11:
; LENGTH: 41
5451527-11
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APPLICATION NUMBER: US/08/419,519 FILING DATE:

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RESULT 102
19-918-218-1
19-56-918-218-1
19-56-918-218-2-1
19-56-918-218-2-1
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10-56-918-2-1
10-56-918-2-1
10-56-918-2-1

                             FILING DATE:

FILING DATE:

CLASSIFICATION: 514

PRIOR APPLICATION NATA:

APPLICATION NOHER: 05 08/049,869

FILING DATE: 20-ARP-1993

ATTORNEY/ACBYT INFORMATION:

NAME: WORKSHICK ATE H.

REPERBENC/POCKET NUMBER: 29,959

REPERBENC/POCKET NUMBER: 29,959

TELECOMMUNICATION INFORMATION:

SEQUENCE CHARACTERISTICS:

LENGTH: 30 anino acid

TIPE: omino acid

TIPE: omino acid

TIPE: information i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 15.4%; Score 120; Best Local Similarity 100.0%; Pred. No. Matches 23; Conservative 0; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIGASTICATION
PRIOR APPLICATION
PRIOR APPLICATION UDAR:
APPLICATION UNDER: 09,282,357
FILING DATE: 09-MA-1997
PPLICATION UNDER: 09,047-1997
APPLICATION UNDERS: 08,199,382
FILING DATE: 18-TEB-1994
ATTORNEY/ACEWT INFORMATION:
NAME: MARCH HISPORMATION:
FERERRICATION WINDER: 29,59
REFERENCY/DOCKET NUMBER: 29500-20
TELECOMBINICATION INFORMATION:
TELECOMBINICATION INFORMATION:
TELECOMBINICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 202-887-0763
TELEX:
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
GENERAL INCRAATION:
APPLICANT: BOTHE, IRVING
TITLE OF INVENTION: MODIFEED PROTEIN AND PEPTIDE
TITLE OF INVENTION: PRARMACEUTICALS
CORRESPONDENCE ADDRESS:
ANDRESSEE: MORRISON & POERSTER
STREET: 2000 Pennsylvania Ave. N.W.
CITY: Weshington, D.C.
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READALE FORM:
MEDIUM TYRE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATIG SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 15.4%; Score 120; D
Best Local Similarity 100.0%; Pred. No. 2.
Matches 23; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . Sequence 13, Application US/08419519 & Patent No. 5792460
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Ouery Match 15.44; Score 120; DB 4; Length 28 Best Local Smilarity 100.04; Pred. No. 2.4e-05; Matches 23; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60/147,452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1999-08-05
PRIOR APPLICATION WIMBER: 60/142,243
PRIOR FILING DATE: 1999-07-02
WUMBER OF SEQ ID NOS: 3
                                                                                                      3, Application US/09604871
No. 6340742
INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            119 SSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 SSSSKAPPPSLPSPSRLPGPSDT 23
                                                                                                                                                                                             FEAL INCOME.
PELICANT: BITG, JOSE,
PPLICANT: BITGE, BENDE
APPLICANT: 1038, HARS-PEC
TITLE OF INVENTION: BATTHROPO
FILE REPERBUCE: 1098 HOMPICA'
FILE REPERBUCE: 7098 HOMPICA'
FILE REPERBU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT CRGANISM: ORGANISM: Homo sapiens US-09-604-871-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
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                                                                                                                                                                                                                                                                               Length 28;
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                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match 15.4%; Score 120; DB 4;
Best Local Similarity 100.0%; Pred. No. 2.4e-05;
Matches 23; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION UNDERS: 08/918,288
FILING DATE: 25 Act-1997
PILING DATE: 09-AVE-1997
FILING DATE: 09-AVE-1997
ATTORNET/ACET INFORMATION:
NAME: MARSHAGE : 29,59
REPRENCE/DOCKET UNDERSE: 29,959
REPRENCE/DOCKET UNDERSE: 29,959
TELECOMMUNICATION INPRESE: 29,959
TELECOMMUNICATION INPRESE: 20,959
                                                                                                                                                                                                                                                                                                                                                                                                                          INTORNATION POR SEC ID NO: 1: SEQUENCE SECUENCE: 2500 MENO acids Tree: amino acid of Tree: acid of
SEQUENCE CHARACTERISTICS:
LENGTH: 28 amino acids
                                                                       TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-918-288-1
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Length 28;

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RESULT 108

15.694-305-339-2

15.694-806-2. Application US/09305639

15.694-806-2. Application US/09305639

15.694-806-2. Application US/09305639

15.694-806-2. Application General Michael W.

15.694-806-2. Application Michael W.

15.696-2. Application Michael W.

16.696-2. Application W.

16.696-
                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                             Query Match
14.21; Score 110; DB 1; Length 53;
Best Local Similarity 59.44; Pred. No. 0.00045;
Matches 19; Conservative 4; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
14.24; Score 110; DB 4; Length 53;
Best Local Smilarity 59.44; Pred. No. 0.00045;
Matches 19; Conservative 4; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 12.7%; Score 99; DB 6; Length 23; Best Local Smilarity 100.0%; Pred. Wo. 0.002; Matches 18; Conservative 0; Wismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 109
5451577 3
FPACHT NO. 5451527
FACHTON TO SECULTION HOW DEPTIDES FOR USE IN ANTIBODY
TITLE OF INVERTION HOG PEPTIDES FOR USE IN ANTIBODY
FORTICATION PROCEDURES
NUMBER OF SEQUENCES: 14
COURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/647,893
FILING DATE: 30-JAM-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 137,31
FILING DATE: 10-JUL-1989
APPLICATION NUMBER: 21,687
FILING DATE: 10-JUL-1988
SEQ ID NO: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 CRPINATLAVEKEGCPVCITVNTTICAGYCPT 41
                                                                                                                                                                                                                                                                                                                                                                                                                         21 CELTNITIAIEKEECRFCISINTTWCAGYCYT 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; LENGTH: 53 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-239-256-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LENGTH: 53
; TYPE: PRT
; OKGANISM: Homo saptens
US-09-305-639-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 23
5451527-3
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                                                                                                                                                                                                                                  2; Gaps
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                                                                                                                                                                                                                                                                                             51 PALPQV -- VCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCOCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 PARPKIQKTCTFKELVYETVRVPGCAHHADSLYTYPVATQCHCGKCDSDSTDC 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION STATING MATCHE, MATCHEN M.
APPLICANT BOILD. RAVING; MATCHEN M.
TITLE OF INVENTION: MODIFIED FORMS OF REPRODUCTIVE HORMONES;
NUMBER OF SEQUENCES: 16
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/532,254
FILING DATE: 01-UN-1907
PRICE APPLICATION NUMBER: 133,646
FILING DATE: 11-FEB-1999
                                                                                                                                                   Ouery Match 15.1%; Score 117; DB 1; Length 75; Best Local Smilarity 14.0%; Pred. No. 0.00014; Matches 18; Conservative 14; Hismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match 15.1%; Score 117; DB 6; Length 76; Best Local Smilarity 34.0%; Pred. No. 0.00014; Matches 18; Conservative 14; Mismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: USA

ZIP: JOUGG-1812
COMPUTER REACHEE FORM:
MEDINA TIPE: FLOPPY disk
COMPUTER: TIBH FOC compatible
SUPERATING SYSTEM: FLO-DGS/MS-DOS
SOFTWARE: PALEALIA Release 11.0, Version 11.25
CURRENT APPLICATION ADAR-SEE 11.0, Version 11.25
APPLICATION WHERE: US/OB/219,256
FILING DATE: OC-MAY-1994
CLASSIFICATION: 139
ATTORNEY/AGENT INFORMATION:
NAME: WHENSHIED, KATE H.
REGISTRATION NUMBER: 29,595
TELECOMMUSICATION INFORMATION:
TELEFRANICON NUMBER: 29,595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2. Application US/08239256
| Sequence 2. Application US/08239256
| GEREAL INFORMATION
| APPLICANT: BATZEN MARTHN M. APPLICANT: MARTHN M. APPLICANT: REBNE, JEFFEY U. APPLICANT: REBNE, JEFFEY U. APPLICANT: REBNE, JEFFEY U. APPLICANT: REBNE, JEFFEY U. APPLICANT: COUNTRESSE: MODERSSEE: MORTISON & FORESTER ADDRESSEE: MORTISON & FORESTER ADDRESSEE: MORTISON & COUNTRY: Use Mashington, D.C. COUNTRY: USA
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-239-256-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; SEQ ID NO:5:
; LENGTH: 76
5177193-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 107
US-08-239-256-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 106
5177193-5
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APPLICANT: Minghetti, Luisa; Waterfield, Michael; Marchioni, Mark; APPLICANT: Chen, Malo Sur Hiles, Iman Title OF INVENTION: Gilal Mitogenic Factors, Their TITLE OF INVENTION: Preparation and Use CONRESPONDENCE: 184
CORRESPONDENCE: 1816
ADDRESSEE: Felfe & Lynch
STREET: WOS, Third Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goodearl, Andrew; Stroobant, Paul;
Minghetti, Luiss; Waterfield, Michael; Marchioni, Mark;
Chen, Maio Su; Hiles, Ian
WUENTION: Glial Mitogenic Factors, Their
WUENTION: Preparation and Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 91; DB 1; Length 26;
Pred. No. 0.013;
6; Mismatches 4; Indels
                                                                                                                                                                                                                                                            ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
COUNTR: USA
COUNTR: USA
COUNTR: USA
COUNTR: READABLE FORM:
MEDIUM TIPE: Diskette, 5.25 lach, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRICKAPLICATION NUMBER: 07907,138

PILING DATE: 30-10N-1992

PRIOR APPLICATION NUMBER: 07683,703

FILING DATE: 03-APRIL-1991

PRIOR APPLICATION NUMBER: 07683,703

FILING DATE: 03-APRIL-1991

APPLICATION NUMBER: 07.89

PRICKAPTION NUMBER: 07.89

APPLICATION NUMBER: 07.89

RECESTATION NUMBER: 07.89

RECESTATION NUMBER: 07.89

RECESTATION NUMBER: 07.89

RECESTATION NUMBER: 07.89

REPERRICATION NUMBER: 07.89

RECESTATION NUMBE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM
COMPUTER: IBM
COMPUTER: TEM
COMPUTER: Mordperfect
CURRENT APPLICATION DATA:
APPLICATION NATE:
APPLICATION 
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US-08-249-322A-20
Sequence 20, Application US/08249322A
Sequence 20, Application US/08249322A
Setem No. 5716930
GENERAL INFORMATION:
GENERAL INFORMATION:
Material Information Madew: Stro
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Best Local Similarity 61.5%; Pr
Matches 16; Conservative 6;
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TITLE OF INVENTION: G
TITLE OF INVENTION: P
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TOPOLOGY: linear
US-08-469-569-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ογ
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                                                                                                                                                                                                                                                            APPLICANT: Goodearl, Andrew; Stroobant, Paul;
APPLICANT: Migherti, Luise; Materfield, Michael; Marchionl, Mark;
APPLICANT: Migherti, Luise; Materfield, Michael; Marchionl, Mark;
APLICANT: Chen, Maio Su; Hiles, Lan
TITLE OF INVENTION: Glial Mitogenic Rectors, Their
TITLE OF INVENTION: Preparation and Use
NUMBER OF SEQUENCES: 184
ADDRESSED: Felfe & Lynch
STREF: 805 Third Avenue
CITY: New York City
STRIE: New York City
STRIE: New York
ZIP: 10022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 11.7%; Score 91; DB 1; Length 26; Best Local Smilarity 61.5%; Pred. NO. 0.101; Matches 16; Conservative 6; Wismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 111.
2-08-469-569-20
3 Sequence 20, Application US/08469569
3 Patent No. 5606012
5 Patent No. 5606012
5 APPLICANT: Goodearl, Andrew: Stroobant, Paul;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM. AND COMPUTER: IIIN
COMPUTER: IIIN
COMPUTER: MAINTER SYSTEM: PC-DOS
SOFWAME: WATGHOFFECT
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/016,555B
FLINKO DATE: 34-MR-1993
FRIUK DATE: 32-OT-1992
FRIUK DATE: 32-OT-1992
FRIUK DATE: 32-OT-1992
PRIOR APPLICATION NUMBER: 07/940,189
FILIKO DATE: 03-OT-1992
PRIOR APPLICATION NUMBER: 07/940,189
FILIKO DATE: 03-OTW-1992
PRIOR APPLICATION NUMBER: 07/940,189
FILIKO DATE: 03-OTW-1992
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PRELICATION NUMBER: U.K. 91 07566.3
FILING DATE: 10-APRIL-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ENT instance A.
A.1. Christine H.
FION NUMBER: 34,266
                                                                                                                   ), Application US/08036555B 5530109
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ON NUMBER: 07/863,703
E: 03-APRIL-1992
ATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 ELSFASYRLPGCPPGVDPMVSFPVAL 26
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TELECOMONICATION INFORMATION:
TELEPRINE: (212) 688-9200
TELEFRIX: (212) 888-1884
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 26
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STRANDEDNESS:
TOPOLOGY: linear
US-08-036-5558-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: TSA
REGISTRATI
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4; Indels
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APPLICANT: Materfield, Michael
APPLICANT: Marchioni, Mark
APPLICANT: Marchioni, Mark
APPLICANT: Grein, Marchioni, Marchioni, Marchioni, Marchioni, Marchioni, TITLE OF INVENTION: GLIAL MITOGENIC FACTORS, THEIR
TITLE OF INVENTION: PREPARATION AND USE
NUMBER OF SEQUENCES: 187
CORRESONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 116 Federal Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION.

PILLIA DATE: 33-CCT-1,7, 200 DATE: 100 DAT
                                                                                                                                                                                                                                 CAMPUTER: IBM Compatible
OPERATING STSTEM: DOOR
SOFTWARE: Passisso for Windows Version 2.0
CURRENT APPLICATION DATA:
FILICATION NUMBER: US/08/469,526A
FILIC DATE: 05 June 1995
CLASSIFICATION: 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 11.7%; Score 91; DB 1;
Best Local Similarity 61.5%; Pred. No. 0.013;
Matches 16; Conservative 6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                    PULCATION: 433

APPLICATION DATA:
APPLICATION MARR: 08/036,555

FILING DATE: 24-MAR-1993
APPLICATION WINGER: 07/965,173

FILING DATE: 23-02T-1992
APPLICATION WINGER: 07/940,389

PILING DATE: 03-58F-1992
APPLICATION WINGER: 07/907,138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20, Application US/08734591A Patent No. 5854220 GENERAL INFORMATION:
                                                                               CITY: Boston
STATE: MA
COMPTR: 0AA
COMPUTER READABLE FORM:
WEDIUM TYPE: Diskette
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbi
STREET: 176 Federal Str
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Boston
STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 114
US-08-734-591A-20
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                                                                                             STATE: New York
2004TRT: UGA.
21P: 10022
COMPUTER READABLE FORM:
COMPUTER: DISRette, 5.25 Inch, 360 kb storage
COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                             SOFWARE: WORDperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/249,322A
FILING DATE: 25-HAY-1994
CLASSIFICATION: 435
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US-08-469-526A-20
; Sequence 20, Application US/08469526A
; Satent No. 5792849
; CENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 805 Third A
CITY: New York City
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE; anino acid
; STRANDEDNES:
; TOPOLGGY: linear
US-08-249-322A-20
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4; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11.7%; Score 91; DB 4; Length 26;
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APPLICANT: MINGHETTI, LUISA
APPLICANT: MERETELD, MICHAEL
APPLICANT: CHEN, MARIO S.
APPLICANT: CHEN, MARIO S.
APPLICANT: CHEN, MARIO S.
TITLE OF INVENTION: PEREPRANTION AND USE
TITLE OF INVENTION: PEREPRANTION AND USE
CURRENT PELLING DATE: 1995-06-08
EARLIER APPLICATION NUMBER: 08/036,555
EARLIER FILING DATE: 1995-06-08
EARLIER FILING DATE: 1995-03-14
SOUTHARD OF SED ID NOS: 222
SOUTHARD: PRAILESTER FILING DATE: 1995-06-08
SOUTHARD: PEREPRESED FOR WINDHER: 08/036,555
SARLIER FILING DATE: 1995-06-08
SOUTHARD: PEREPRESED FOR WINDHER: 08/036,555
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 435

PRIOR APPLICATION HOUSER: 08/11/396

PRIOR APPLICATION DATE: 18/14/193

PRIOR APPLICATION DATE: 18/14/193

PRIOR APPLICATION DATE: 07/984,085

PRIOR APPLICATION DATE: 07/984,085

PRIOR APPLICATION NAMER: 07/984,085

PRIOR APPLICATION NAMER: 07/951,747

                                                                                           COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
SOFTWARE: MOTGBETGET
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/469,660
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Patent No. 6147190
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: LENTH: 26
: TYPE: PRT
; ORGANISM: Bos taurus
US-08-470-335-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
US-08-469-660-20
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US-08-470-335-20
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APPLICANT: Medariney, Robert M.
TITLE OF INVENTION: INHIBITORS OF CELL PROLIFERATION,
TITLE OF INVENTION: THEIR PREPARATION AND USE
UNMERS OF SEQUENCES: 184
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STRERT: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FRUIND FARLEAUTON NUMBER: UK 91 07566.3
FILIND DATE: 10-APR.1991
ATTORNEY ACENT: 10-APR.1991
TELEPHONE: (617) 428-0206
                                                                       COMPUTER READABLE FORM:
WEDION TYPE: 3.5 ° Diskette, 1.44 Mb
COMPUTER: INH COMPUTED PERTIAL
COMPUTER: INH COMPUTED PERTIAL
COMPUTER: MIADAWSS
SOFTWARE: Wordferfect (Version 7.0)
SOFTWARE: Wordferfect (Version 7.0)
APPLICATION DATA:
APPLICATION DATA:
CLASSIFICATION DATA:
FILING DATE: 20-CCT-1996
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION MUMBER: 084/70,335
FILING DATE: 06-JUN-1995
FILING DATE: 07-MR-1995
PRIOR APPLICATION DATA:
APPLICATION MUMBER: 07-MR-1993
PRIOR APPLICATION DATA:
APPLICATION MUMBER: 07-MR-1993
FILING DATE: 07-MR-1993
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TE: 03-SEP-1992
ATION DATA:
NUMBER: 07/907,138
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N NUMBER: 07/907,138
E: 30-JUN-1992
ATION DATA:
N NUMBER: 07/863,703
E: 03-APR-1992
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Query Match 11.7%; Score 91;
Best Local Similarity 61.5%; Pred. No. (
Matches 16; Conservative 6; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 119
US-08-470-339-20
US-08-470-339-20
'Sequence 20, Application US/08470339C'; Patent No. 633286
'PEREAL INFORMATION:
PEREAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Onery Match 11.74; Score 91; DB 4; Length 26; Best Local Smillarity 61.54; Pred, No. 0.101; Matches 16; Conservative 6; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: HILES, IAM.
TITLE OF INVENTION: GLIAL WITGCENIC FACTORS, THEIR
TITLE OF INVENTION: EDERNALMY AND USE
TILE REPERENCE: 04695,00200.
CURRENT APPLICATION UNDERS: USG.08/735,021B
CURRENT APPLICATION UNDERS: USG.08/735,021B
EARLIER APPLICATION UNDERS: 036,036,555
EARLIER APPLICATION UNDERS: 03/036,555
EARLIER FILING DATE: 1933-03-04
EARLIER FILING DATE: 1937-03-04
EARLIER FILING DATE: 1932-04-03
EARLIER FILING DATE: 1932-04-03
EARLIER FILING DATE: 1932-04-03
EARLIER FILING DATE: 1922-04-03
EARLIER FILING DATE: 1925-04-03
EARLIER PARTIER FI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: HILES, IAN
TITLE OF INVENTION: ELIAL MITOGENIC FACTORS, THEIR
TITLE OF INVENTION: PREPARATION AND USE
NUMBER OF SEQUENCES: 187
                     Best Local Similarity 61.5%; Pred. No. 0.013;
Matches 16; Conservative 6; Mismatches
                                                                                                                                                                                                                                                                                                                                          RESULT 117
9: 08-75: -01-20
9: Sequence 70, Application US/087350218
9: Patent No. 6194371
9: Retent No. 6194371
9: RAPLICANT: GODDERMI, MUNEW
APPLICANT: STROGBART, PAUL
APPLICANT: MINTERFELD, MISA
APPLICANT: MINTERFELD, MISA
APPLICANT: MRCHIONNI, MARK
APPLICANT: HIRSE, TANI
                                                                                                                                     62 DVRFESIRLPGCPRGVNPVVSYAVAL 87
:: | |:||||| ||:|:|||
1 ELSFASVRLPGCPPGVDPMVSFPVAL 26
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; ORGANISM: Bos taurus
US-08-735-021-20
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US-08-734-664A-20
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Sequence 30. Application PC/TUS9506846A

Sequence 30. Application PC/TUS9506846A

GENERAL INFORMATION:
APPLICANT: Goodeal, Andrew David; Stroobant, Paul;
APPLICANT: Mapheti, Luisa; Waceffeld, Michael; Warchioni, Mark;
APPLICANT: Chem, Malo 38; Hiles, Ian
1TILE OF INVENTION: Glial Mitogenic Factors, Their
1TILE OF INVENTION: Preparation and Use
NUMBER OF SEQUENCES: 178

CORRESPONDENCE ADDRESS:
ADDRESSEE: Felle 4 Lynch
STREET: 805 Third Avenue
CITT: New York City
STREET: Way York City
STREET: UGA

COUNTRY: USA

LIF: 10022

COMPTON READABLE FORM:
MEDIUM TYPE: 118M:
COMPTON READABLE FORM:
COMPTON READABLE FORM:
COMPTON READABLE FORM:
MEDIUM TYPE: 118M:
COMPTON READABLE FORM:
COMPTON R
                                                                                                                      Ouery Match 11.74; Score 91; DB 5; Length 26; Best Local Similarity 61:54; Pred. No. 0.013; Matches 16; Conservative 6; Hismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM
COMPUTER: IBM
COMPUTER: COMPUTER: COMPUTER: WORDGESTER: WORDGESTER: COMPUTER: ETLING DATE: 25-MAY-1995
PRICE APPLICATION NUMBER: PCT/US95/06846A
PRICE APPLICATION NUMBER: 08/249,322
FILING DATE: 36-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 07/907,138
FILING DATE: 30-010N-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/863,703
FILING DATE: 03-APRIL-1992
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
FILING DATE: 10-APRIL-1991
ATTORNEY AGENT INFORMATION:
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PLASSIFICATION DATA:
APPLICATION NUMBER:
PLIAN DATE: 24 - HAR-1993
PRIOR APPLICATION DATA:
APPLICATION DATA:
FILLS DATE: 23 - CCT-1992
PRIOR PAPLICATION NUMBER: 07/965,173
PRIOR APPLICATION NUMBER: 07/960,139
PRIOR APPLICATION NUMBER: 07/940,1399
PRIOR APPLICATION NUMBER: 07/940,1399
PRIOR APPLICATION NUMBER: 03-86P-1992
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PCT-US94-05083C-20
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Sequence 20, Application PC/TUS9405083C
GENERAL INFORMATION:
APPLICANT: Robert Sklar, Mark Marchionni,
APPLICANT: Robert Sklar, Mark Marchionni,
APPLICANT: Boald I. Govynne
TITLE OF INVENTION: WISCLE CONDITION
NUMBER OF SECONDERSS:
ADDRESSED: Fish & Richardson
STREET: 225 Frank Enthardson
STREET: Assachusetts
CORRESPONDERSE MASSACHUSETE
CITY: Massachusetts
IIP: 02110-2804
COMPUTER READALE FORM:
MEDIUM TYPE: Diskette, 5.25 Inch, 360
MEDIUM TYPE: biskette, 5.25 Inch, 360
MEDIUM TYPE: Kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 11.7%; Score 91; DB 4;
Best Local Similarity 61.5%; Pred. No. 0.013;
Matches 16; Conservative 6; Mismatches
CURRENT APPLICATION NUMBER: US/08/470,339C
EMRLIER FLING DATE: 1959-60-60
EMRLIER FLING DATE: 1959-60-60
EMRLIER FLING DATE: 1959-60-60
EMRLIER FLING DATE: 1953-60-3-8
EMRLIER FLING DATE: 1952-60-30
EMRLIER FLING DATE: 1959-04-10
EMRLIER FLING DATE: 1999-04-10
SEQ IO NO. 20
SEQ IO NO. 20
EMRLIER FALSED (FOR WINDER: 70-756-3 GB
EMRLIER FLING DATE: 1999-04-10
SEQ IO NO. 20
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APPLICATION NUMBER: 08/209,204
FILING DATE: 08-MAR-94
PRIOR APPLICATION DATA:

FILING DATE: 06-MAR-94
APPLICATION NUMBER: 08/59,022
FILING DATE: 06-MAY-93
ATTORNEY AGENT INFORMATION:

NAME: CLARK PAULT
REGISTRATION NUMBER: 30,162
REFERENCE/DOCATET NUMBER: 04985/028W01
TELECHOMUNICATION HORDER: 04085/028W01
TELECHOMUNICATION HORDER: 047-500
TELECHOMUNICATION HORDER: 047-500
TELECHOMUNICATION HORDER: 047-500
TELECHOMUNICATION HORDER: 2001
TELECHOMUNICATION HORDER: 2001
TELECHOMUNICATION HORDER: 2001
SEQUIEMET: 26
LENGTH: 26
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OPERATING SYSTEM: PC-DOS
SOFTWARE: PAPLICATION DATA:
APPLICATION NAME: PCT/US94/05083C
FLING DATE: 06-MAY-94
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
CORGANISM: Bos taurus
US-08-470-339-20
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Onery Match 11.34; Score 88; DB 3; Length 702;
Best Local Similarity 23.14; Pred: No. 1.2;
Matches 34; Conservative 14; Hismatches 43; Indels 56; Gaps
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                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:

OURRESPORDENCES:
ADDRESSEE:
Dehlinger & Associates
STRET:
150 Cambridge Ave. Suite 250
CITY:
Palo Alto
CITY:
Palo Alto
CONFUTR:
105
COMPUTER:
105
COMPUTER:
105
COMPUTER:
106
COMPUTER:
107
CO
                                                                                 LEUL RO. WORMATION:
MEDICANT: Laus, Rether
APPLICANT: Laus, Rether
APPLICANT: WHOGY, Cuttis L.
TITLE OF INVENTION: Immunostimulatory Composition and Method
WORSER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 124
US-09-344-195-4
US-09-344-195
Sequence 4, Application US/09344195
Fetchir No. 6210662
Fetchir No. 6210662
TOPICAM: Laus, Reiner
Ruegay, Cuttls L.
Nu. Honoyu
TITLE DE INVENTION: Immunostimulatory Compositions
NUMBER OF SEQUENCES: 10
CORRESPONDENCE 10
CORRESPONDENCE DEDILINGER 6 ASSOCIATES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          113 DPRFQDSSSSKAPPPSLPSPSRLPGPS 139
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Sequence 4, Application US/08579823A; Patent No. 6080409; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ç
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Best Local Similarity 23.1%; Pred: No. 1.2;
Matches 34; Conservative 14; Mismatches 43; Indels 56; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVAL ---- SCQ - CAL - CRRSTTDCGGPKDHPLTCD 112
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                                                                                                   0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPURE REACHABLE FORM:
COMPUTER IN PAGE COMPACIBLE
COMPUTER: Ploppy disk
COMPUTER: IN PR COMPACIBLE
COMPUTER: Ploppy disk
COMPUTER: Ploppy disk
COMPUTER: Ploppy disk
COMPUTER: Pacent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/146,283
FILING DATE: 03-SEPT-1998
CLASSPICATION NUMBER: US/09/146,283
FILING DATE: Udda R.
REGISTRATION NUMBER: 42,70
REPERMENCATION HUMBER: 42,70
REPERMENCATION HUMBER: 42,70
FILING DATE: 550-34-0860
FILING DATE: 550-34-0860
FIRECHARACTERISTICS:
SEDIENCE CHARACTERISTICS:
CROCKOFF: 11near
NOLECULE TYPE: APPLICATION
FIRECHARACTERISTICS:
FIRE: ANIMO acids
FIRE: ANIMO ANIMO ACIDS
FIRE: ANIMO A
     Query Match 11.74; Score 91; DB 5; Length 26; Best Local Similarity 61.54; Pred. no. 0.013; Americhes 4; Indels Matches 16; Conservative 6; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4 Application US/09146283
Sequence 4 Application US/09146283
Patent No. 5976546
GEREAL INFORMATION:
APPLICANT: Laus, Reflect.
APPLICANT: Laus, Reflect.
APPLICANT: Will Hongur
TITLE OF INVENTION: Immunostimulatory Compositions
VUMBER OF SEQUENCES: 10
CONRESPONDENCE ADDRESS:
ADDRESSEE: Dellinger & Associates
STREET: 350 Cambridge Ave. Suite 250
CITY: Palo Alto
CONTRY: QA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          638 DDKGCPAEQRASPLTSLEAPARSPSPS 664
                                                                                                                                                                         62 DVRFESIRLPGCPRGVNPVVSYAVAL 87
                                                                                                                                                                                                                                    :: | |:||||| ||:|:||: |||
1 ELSFASVRLPGCPPGVDPMVSFPVAL 26
                                                                                                                                                                                                                                                                                                                                                                                            RESULT 122
US-09-146-283-4
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RESULT 123

: PC-DOS/MS-DOS tIn Release #1.0, Version #1.25

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RESULT 126

(19.08+48)-48-49-5

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 10.99; Score 85; DB 1; Length 42; Best Local Similarity 27.34; Pred. NO 0.084; Matches 17; Conservative 1; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 CRNTCCNCCTGACN------CNY----CNY
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FILING DATE: 06-MAY.137-
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: WORSHIEG, KATE H.
NAME: WORSHIEG, KATE H.
REGISTRATION WINBER: 29.959
FEEFERENCE/DOCKTE NUMBER: 29.959
FEEFERENCE/DOCKTE NUMBER: 29.959
FEEFERSTCE/DOCKTE NUMBER: 20.959
FEEFERSTCE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/DOCKTE/
                                                                                                                                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/239,256
FILING DATE: 06-MAY-1994
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: WILLIAM CASSIFICATION: 516
ATTORNET MEDIT HORMATION: MARE: KONSKI, ANTONETE F. REGISTRATION NUMBER: 34,702
FELECHOMANICATION INNUBR: 32030
TELECHOMANICATION INNUBR: 2020
TELECHOMANICATION INDIBLE: 2020
TELECHOMANIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
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Best Local Similarity 23.1%; Pred: No. 1.2;
Matches 34; Conservative 14; Mismatches 43; Indels 56; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         562 PCHPECOPONGSVTCFGPEADQCVAC-----AHYK 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSYAVAL----SCQ-CAL-CRRSTTDCGGPKDHPLTCD 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   592 DPPFCVAR---CPSGVKPDLSYMPIWKFPDEEGACQPCPINCTHSCVDL------ 637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 PLRPRCRPINATLAV --- EKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: homo saplens
INDIVIDUAL ISOLARE: GM-CSF-Her-2 fusion protein; Fig. 8
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-344-195-4
                                                                                                                                                                                                                         COMPTRY: USA
COMPTRY: USA
COMPTRY: 194306
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPEY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Relation 1255
CURRENT APPLICATION DATA alloses 11.0, Version 11.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: BOINE, IRVING
APPLICANT: MATLOUGH MATLON APPLICANT: MATLON APPLICANT: MATLON APPLICANT: MATLON APPLICANT: MATLON APPLICANT: MATLON APPRENT LA CORRESPONDENCE ADDRESSEE: MORRISON & PORRISON APPLICANT: MATLON APPLICANT: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HRY/AGENT INFORMATION:
NAME: JUGG, LINGA R.,
REGISTRATION UNBER: 42,702
REPERBENCE/DOCKER UNBER: 7636-0010.21
STREET: 350 Cambridge Ave. Suite 250 CITY: Palo Alto
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/146,283
FILING DATE: 03-SEPT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/09/344,195
FILING DATE: 24-Jun-1999
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       113 DPRFQDSSSSKAPPPSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                638 DDKGCPAEQRASPLTSLEAPARSPSPS 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17, Application US/08239256 Patent No. 5585345 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H: 782 amino acids
amino acid
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 650-324-0960 INFORMATION FOR SEQ ID NO: 4: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: Incar
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION
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US-08-239-256-17
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us-09-813-398-3.default.rai

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TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION: REMATOPOLETIC GROWTH FACTORS, NUCLEOTIDE
TITLE OF INVENTION: REQUENCE ENCODING GROWTH FACTORS AND METHODS OF USE
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TOTHER ADDRESS:
CONTRESSOURCE: ADDRESS:
ADDRESSEE: MORRISON & FORESTER
STREET: 75 Page Mill Road
CITY: Palo Ald
STREET: 15 Page Mill Road
CITY: Palo Ald
STREET: 15 Page Mill Road
COUNTRY: 2011
COUNTRY: THE COMPABLE FORM:
WEDIGH TYPE: RIOPY disk
COUNTRY: STREET FROM:
COUNTRY: STREET FROM:
THE COMPABLE FORM:
COUNTRY: STREET FROM:
THE COMPABLE FORM:
THE C
                                                                                                                                                                                                   64 SLSSVVIVPSSSLGTQTYTCNVNHKPSNTKVDKRVE-LKTPLGDTHTCPRCPEP----- 117
                                                                                                                                                                                                                                                                                                     85 VALSCQC-ALCRRSTTDCGGPK--DHPLTCDDPRFQDSSSSKAPP--PSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                           Query Match 10.7%; Score 83.5; DB 2; Length 389; Best Local Similarity 28.6%; Pred. No. 1.4; Matches 48; Conservative 19; Mismatches 58; Indels 43; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 DVRFESIRLPG------CPRGVNPV-----VSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52 ALPQVV------CCPRGVNPVSYA 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29 NEILGLKLPGEPPLTGNTVCLTLSGLSKRQLGLCLRNPDVTASALQGLHIAVHECQHQLR 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14 NATLAVEKEGCP-----VCITVN--TIICAGYC---PTWT-RVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    102 G----GPKDHPLTCDDPRFQDSSSSKAPPPSLPSP----SRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIPICATION: 536
ATTOWNEY/AGENT INFORMATION:
NAME: KONST. ANTOINETE F.
REGISTRATION HUMBER: 34,202
REGISTRATION HUMBER: 34,202
FELECOMBUNICATION INFORMATION:
FELECOMBUNICATION INFORMATION:
FELECHONE: (415) 494-0792
TELER: 70614
INFORMATION POR SEQ ID NO. 2:
ENGINE CHARACTERISTICS:
LEMRYH: 389 amino acids
TYPE: Amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 128
US-08-485-449-2
: Sequence 2, Application US/08485449
: Patent No. 5824789
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US-08-485-449-2
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US-08-485-449-7
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                                                                                                                                                                  Ouery Watch 10.9%; Score 84.5; DB 2; Length 376; Best Local Similarity 28.3%; Pred: No. 11.; Maches 52; Conservative 18; Mismatches 59; Indels 55; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125 HAVATA--CSLGKINSCGCGWKGSGEQDR-LRAKLIQLQALSRGKPSPSPPGSPS--PG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 10.94; Score 84.5; DB 2; Length 377;
Best Local Similarity 28.94; Pred. No. 1.1;
Matches 52; Conservative 9; Mismatches 62; Indels 57; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               83 YAVALSCQCALCRRSTTDCG----GPKDHPLTCDDPRFQDSSSSKAPPPSLP-SPSRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                      44 -RVLQGVLPALPQVVCNTRDVRFESIRLPG------CPRGVNPV-----VS 82
                                                                                                                                                                                                                                                                                                                                8 PRCRP------INATLAVEKEGCP-----VCITVN--TTICAGYC--PTMT 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PSKEPLRPRCRPINATLAVEKEGC------PVCITVNTTICAGYCPTWTRVLQGV-LP 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-761-277A-45

US-08-761-277A-45

Sequence 4.5 Application US/08761277A

Petent No. 597334

GENERAL HOUSEART DATE OF THE SET OF WORLDOOM STREET. 200 WORLDOOM SET OF THE SET
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REFERENCE/DOCKET NUMBER: GEN-
TECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       377 amino acids
amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-485-449-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-761-277A-45
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180 PQDT 183
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US-08-761-277A-45
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59 NYRDVRFE--SIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLT---CDD 113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 10.5%; Score 81.5; DB 2; Length 207; Best Local Similarity 26.8%; Pred. No. 1.1; No. 1.1; Mismatches 65; Indels 33; Gaps Matches 40; Conservative 11; Mismatches 65; Indels 33; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             44 RATCQPREVVPLTVELMGTVAKQLVPSCVTVQR--CGGCCPD------DGLECVPT 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 RPRCRP -- INATLAVE ----- KEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVC 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: ERIKSSOM, Ulf
APPLICANT: OLOFSSOM, BITGHITEA
APPLICANT: ALITALO, KARI-I
APPLICANT: ALITALO, KARI-I
IITLE OF INVENTION: VASCULAR ENDOTHELIAL GROWTH FACTOR-B AND
ITTLE OF INVENTION: DAY CODING THEREFOR
WHYMEN OF SOCIENCES: 13
CONRESSONDERE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Evenson, McKeown, Edwards & Lenahan, P.L.L.C. STREET: 1200 G Street, N.W., Suite 700 CTTY: Washington STATE: DC
                                                                                                                                                                                                                                                                                   COMPUTER: TEN TOTAL TOTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           114 PRF---QDSSSSKAPPPSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    147 PRSVPGWDSAPGAPSPADITHPTPAPGPS 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 131
US-08-569-063C-15
is Sequence 15, Application US/08569063C
is Patent No. 592691
ignoration US/08569063C
ignoration US/08569063C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26,269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPRONE: (202) 628-884
TELEPRAK: (202) 628-8844
INTELENAK: (202) 628-8844
INTELENAK: (202) 628-8844
INTELENAK: (207) amino acid
TYPE: amino acid
              STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein
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MOLECULE TYPE: protei
ORIGINAL SOURCE:
TISSUE TYPE: human
US-08-609-443B-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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                                                                                                                                             GERERAL INCORATION:

TITLE OF INVERTION: BEATOPOLIFIC GROWTH FACTORS, NUCLEOTIDE
TITLE OF INVERTION: BEATOPOLIFIC GROWTH FACTORS, NUCLEOTIDE
TITLE OF INVERTION: BEATOPOLING GROWTH FACTORS, NUCLEOTIDE
TITLE OF INVERTION: THEREOF
NUMBER OF SEQUENCES:
CORRESORDENCE ADDRESS:
ADDRESSEE: MORRISON, FORESTER
STREET: 75 Page Mill Road
CITT: Palo Alto
STATE: Galfornia
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: THE PART OF THE PART OF THE CAMPAINE FORM:
MEDIUM TIVE: PLOPPY GLS
SORVITHAR: THE PART OF THE PART OF THE CAMPAINE FORM:
COMMUTER READALE FORM:
MADDRESSEE TO STEAT READALE FORM:
MEDIUM TIVE: PLOPPY GLS
SORVITHAR: THE PART OF THE PART OF THE CAMPAINE FORM:
ATLIANTON NUMBER: US /08/449
TELECOMONICATION HOMER: 14,202
RESTSTATION NUMBER: 14,202
RESTSTATION OF 15,2035
RESTSTATION OF 15,2035
RESTSTATION OF 25
RESTSTATION 25
RESTSTATION OF 25
RESTSTATION 25
RESTSTATION 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89 DORWINGSALEGGGRLPHHSAILKRGFRESAFSFSMLAAGVMHAVATA--CSLGKLVSGGC 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 10.7%; Score 83.5; DB 2; Length 389; Best Local Similarity 28.6%; Pred. NO. 1.4%; Matches 48; Conservative 19; Mismatches 58; Indels 43; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29 NEILGIKLPGEPPLTGNTVCLTLSGLSKRQLGLCLRNPDVTASALQGLHIAVHECQHQLR 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 NATLAVEKEGCP-----VCITVN--TIICAGYC---PTMT-RVLGGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 130
US-08-603-443B-15
Squence 15. Application US/08609443B
Squence 15. Application US/0860944B
Squence 15. Application US/0860944B
Squence 15. Application US/0860944B
Squence 15. Application US/0860944B
Squence 15. Application US/086094A
Squence 15. 
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1200 G Street, N.W., Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      102 G----GPKDHPLTCDDPRFQDSSSSKAPPPSLPSP----SRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         147 GWRGSGEODR-LRAKLLQLQALSRGKSFPH$LPSPGPGSSPSPGPQDT 193
Sequence 7, Application US/08485449
Patent No. 5824789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-485-449-7
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DERIVATIVE OR A DERIVATIVE OF A FURIN ANALOGUE AND A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 620 PQVLDTHYSTENDV--ETIRASVC------APCHASCATCQGPALTDCLSCPSHA 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 10.1%; Score 78.5; DB 4; Length 709; .
Best Local Similarity 25.3%; Pred. No. 8.5; Matches 39; Conservative 18; Mismatches 46; Indels 51; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54 PQVVCNY----RDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCR-RSTTDCGGPKDH- 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTWTRVLQGVLPAL- 53
COMPUTER: FLORPY disk COMPUTER: ISBN PC COMPOTER: ISBN PC COMPOTED. CLASSIFICATION NATA: 1928/95 FILING DATE: 2-NOV-1996 CLASSIFICATION NATA: RPLICATION NATION: CLASSIFICATION NATA: RPLICATION NATA: RPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GEREALL INCHARTION:
APPLICANT: SCHLOKAT. Uwe
APPLICANT: STRICHER, Bernhard
APPLICANT: PRISCHER, Palko-Guenther
APPLICANT: OPREN; Friedrich
APPLICANT: PALKER, FAIKO-Guenther
APPLICANT: PRISCHER, FAIKO-Guenther
APPLICANT: PERL, Johnn
TITLE OF INVENTION: A FUSION PROTEIN COMPRISING A FUI
TITLE OF INVENTION: HETEROLOGOUS SEQUENCE
NUMBER OF SOUDENCES:
ADDRESSES:
ADD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      667 SLDPVEQTCS----ROSOSSRESPPQ-QQPPRLP 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 9, Application US/08753247 Patent No. 6210929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 901136 72-5399
TELEX: 901136 100: 6: 8EQUENCE CHARACTERISTICS: ELENGTH: 709 anino acid TOPOLOGY: 11near HOLECULE TYPE: Procein US-08-75-24-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 133
JS-08-753-247-9
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TITLE OF INVENTION: DEALWATIVE OR A DERIVATIVE OF A FURIN ANALOGUE AND A
TITLE OF INVENTION: HETEROLOGOUS SEQUENCE
NOMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93 GQHQVRWQILMIRYPSSQLGEMSLEEHS-----QCE-CRPKKKDSAVKPDRAATPHHRPQ 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59 NYRDVRFE--SIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLT---CDD 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 10.5%; Score 81.5; DB 2; Length 207; Best Local SImilarity 26.8%; Pred. NO. 1.1; Marches 40; Conservative 11; Mismatches 65; Indels 33; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7 RPRCRP--INATLAVE-----KEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVC 58
                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: INAPPY DISK
GONDYTER: TIAN PC COMPAILS.
GONTWARE: TEATER TO RECASS #1.0, Version #1.25
SUSTWARE: Retearing Release #1.0, Version #1.25
SUSTWARE: Retearing Release #1.0, Version #1.25
SUSTWARE: Retearing Norm:
APPLICATION NUMBER: US/08/569,063C
FILING DATE: 06-DEC-1995
PRIOR APPLICATION NUMBER: US/08/469,427
FILING DATE: 06-JUN-1995
PRIOR APPLICATION NUMBER: US/08/469,427
PRIOR APPLICATION NUMBER: US/08/469,427
PRIOR APPLICATION NUMBER: US/08/469,427
PRIOR APPLICATION NUMBER: US/08/469,427
PRESERREMENCACOCKET NUMBER: 195
RECISTRATION NUMBER: 26,269
REPERREMENCACOCKET NUMBER: 1064/41979CP3
TELEPHONE: (122) 628-8804
TELEPHONE: (122) 628-8804
TELEPHONE: (122) 628-8804
TELEPHONE: (122) 628-8804
TELEPHONE: SEQ 10 NO: 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : Foley & Lardner
3000 K Street, N.W., Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      114 PRF---QDSSSSKAPPPSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               147 PRSVPGWDSAPGAPSPADITHPTPAPGPS 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/08753247
Patent No. 6210929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCHLOKAT, UWE
FISCHER, Bernhard
FALKWER, Falko-Guen
DORNER, Friedrich
EIBL, Johann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 207 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDENESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
ORIGIAL SOURCE:
TISSUE TYPE: human
US-08-063C-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 20007-5109
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS ADDRESS: Foley & 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Washington
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40433/149

13;

us-09-813-398-3.default.rai

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Ouery Match 10.1%; Score 78.5; DB 4; Length 719; Best Local Similarity 25.3%; Pred. No. 8.7; Matches 39; Conservative 18; Mismatches 46; Indels 51; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     575 PEGLPVPPESSGCKTLTSS----QACVVCEEGFSLHQKSCVQHCP------PGFA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  620 PQVLDTHYSTENDV--ETIRASVC------APCHASCATCQCPALTDCLSCPSHA 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          54 POVVCNY----RDVRPESIRLPGCPRGVNPVVSYAVALSCQCALCR-RSTTDCGGPKDH- 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 PSKEPLRPR --- CRPINATLAVEKEGCPVC --- ITVNTTICAGYCPTMTRVLQGVLPAL 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Barry Allip J.
APPLICANT: Barry Allip J.
APPLICANT: Barry Allip J.
APPLICANT: Barry Allip J.
APPLICANT: Brake, Anthony J.
APPLICANT: Raufman, Raadal J.
APPLICANT: Tange-Oison, Petticia
APPLICANT: Wasley, Louise
APPLICANT: Wondy, Polly A.
TITLE OF INVERTION: Betpression of PACE in Host Ceils and
TITLE OF INVERTION: Methods of Use Thereof
CORRESPONDENCE ALADRESS:
ADDRESSEE: Howson & Howson
STREET: Spring House
CORRESPONDENCE ALADRESS:
ADDRESSEE: Howson & Howson
STREET: Spring House
CORRESPONDENCE FOR STREET: Pennsylvania
COUNTRY: U.S.
TITLE PENNSYLVANIA
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/ANS-DOS
SOFTWARE: Petentin Release #1.0, Version #1.25
CURRENT APPLICATION NATA:
APPLICATION WHERE: US/07/885,972A
CLIRED PATE: 1947
CURRENT APPLICATION NATA:
APPLICATION NATES:
APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/621,092
FILLIG DATE: 26-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/620,859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IR: US 07/621,457
NOV-1990
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29-NOV-1990
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US-07-085-972A-2
US-07-085-972A-2
Sequence 2. Application US/07085972A
; Patent No. 5460950
; Parent No. 5460950
PRIOR APPLICATION DESCRIPTION OF APPLICATION UNMER: US (FILING DATE: 30-NOV-1990 ATTORNEY/AGENT INFORMATION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: SCHLONGAT, UN-
APPLICANT: SCHLONGAT, UN-
APPLICANT: FISCHER, BEINDATCH
APPLICANT: FALKER, PEIAC-GUERTHEAT
APPLICANT: EIBL, Obbano
TITLE OF INVENTION: A PUSION PROTEIN COMPRISING A FURIN
TITLE OF INVENTION: DERIVATIVE OR A DERIVATIVE OF A FURIN
TITLE OF INVENTION: THERROLOGOUS SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             620 PQVLDTHYSTENDV--ETIRASVC------APCHASCATCQGPALTDCLSCPSHA 666
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CORRESPONDENCES: 29
CORRESPONDENCE ADDRESSES:
ADDRESSEE: FOLGY & LAIDER
ADDRESSEE: FOLGY & LAIDER
CITY: Washington
CITY: Washington
CITY: Washington
COUNTRY: USA
21P: 20007-5109
COMPUTER INDRESSES:
COMP
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FILIGO DATE: AT 1928/95
FILIGO DATE: AT 1928/95
FILIGO DATE: AT 1928/95
ATTORNEY AGENT INFORMATION:
NAME: BENT. STEPHON A.
RECEISTRATION UNDERS: 39,768
FERENCE/DOCKET NUMBER: 40433/14;
TELECOMOMICTAIN INFORMATION:
TELECOMOMICTAIN INFORMATION: 9:
SEQUENCE CHRACTERISTICS:
LEMGTH: 713 amino acid
TYPE: maino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 12, Application US/08753247
Patent No. 6210929
GENERAL INFORMATION:
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PRIOR APPLICATION UNDERS.
FILING DATE: 24 NOV-1995
ATTORNEY/ACETT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION WOMBER: 29,768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ) MOLECULE TYPE: protein US-08-753-247-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 134
US-08-753-247-12
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575 PEGLPVPPESSGCKTLTSS-----QACVVCEEGFSLHQKSCVQHCP------PGFA 619
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-0865-203-2
US-0865-2
US-0865-
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COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAREITIN Release #1.24
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION MANBER: US/08/865,203
FILING DATE: 29-MAY-1997
CLASSIFICATION: 4.4
ATTORNEY/AGENT INFORMATION:
NAME: TTRA, JOSSICA H.
REGISTRATION WINBER: 40.846
REFERENCE/DOCKET WUNBER: 29.441 DIV
                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                 ; MOLECULE TYPE: protein US-07-885-972A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 11753
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOBDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Jericho
STATE: New York
COUNTRY: U.S.A.
ATTORNEY/AGENT INF
NAME: BAK, MAIY
REGISTRATION NUM
REGISTRATION
TELECOMMUNICATION
TELEPHONE: 215-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Brake, Anthony J.
APPLICANT: Kaufmon, Raudah.
APPLICANT: Tekamp-Olson, Randah.
APPLICANT: Tekamp-Olson, Couise
APPLICANT: Wasley, Louise
APPLICANT: Wong, Polly A.
APPLICANT: Wong, Folly A.
APPLICANT: Wong, Polly A.
TITLE OF INVENTION: Expression of PACE in Host Cells and
TITLE OF INVENTION: Expression of PACE in Host Cells and
TITLE OF INVENTION: A CONSESSES.
ADDRESSEE: Wowson & Howson
STREET: Spring House Corporate Center, P.O. Box 457
CITT: Spring House
STATE: Pennsylvania
                                                                                                                                                                                                                                                                                                                                                                                                                                                               5; DB 1; Length 794;
9.7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: Pennsylvania
CUMTRY: U.S.A.
21P: 19477
COMPTRY BLADALE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTRY: IBM FOC COMPALIALE
ORENTING SYSTEM: PC-DGS/MS-DGS
SOFTWARE: Patentin Release #1.0, version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
10.1%; Score 78.5; DB
Best Local Similarity 25.3%; Pred. No. 9.7;
Matches 39; Conservative 18; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSITICATION A13:
PRICIA APPLICATION DATA:
APPLICATION NUMBER: US 07/621,092
FILING DATE: 25 NOV-1990
PRICIA TON THE 29 NOV-1990
FILING DATE: 29 NOV-1990
PRICIA APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
PPLICATION NUMBER: US/07/885,972A
FLING DATE: 19920520
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            L INFORMATION:
LINEDRATION:
LCANT: BERKE, Anthony J.
LCANT: Kaufman, Rnadal J.
LCANT: Reamp-Olson, Particla
LCANT: Wasley, Louise
LCANT: Wooley, Polly A.
                                           CATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DATE: 30-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4, Application US/07885972A
Patent No. 5460950
                              31,215
                                                                                                                                                                                                                      794 amino acida
TYPE: AMINO ACID
TOPOLOGY: 11-
                                                                                                                                                         TELEFAX: 215-540-5918
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
LENGTH: 794 amino aci
                                                                                                                                                                                                                                                                                                                                                              ; MOLECULE TYPE: protein US-07-885-972A-2
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FILING DATE:
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Query Match 10.1%; Score 78.5; DB 2; Length 794; Best Local Similarity 25.1%; Pred. No. 9; 7. Matches 39; Conservative IB; Mismatches 46; Indels 51; Gaps 13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          54 POVYCNY----RDVRFESIRLPGCPRGVNPVVSYAVALSCOCALCR-RSTTDCGGPKDH- 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620 PQVLDTHYSTENDV--ETIRASVC------APCHASCATCQGPALTDCLSCPSHA 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTMTRVLQGVLPAL- 53
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US -08-745-880-2
US -08-745-880
US -08-745-880
Pacent No. 5965425
Pacent No. 
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PRIOR APPLICATION DATA.
APPLICATION NUMBER: 02 07/621,443
FILING DATE: 29-NOV-1990
PRIOR APPLICATION DATA.
APPLICATION NUMBER: 05 07/621,457
FILING DATE: 30-NOV-1901
APPOSNEY/AGENT INFORMATION:
SEQUENCE CHARACTERISTICS:
LENGTH: 794 annino acids
FYRPE: annino acid
STRANDENESS: SIGGLE
TOPOLOGY: Linear
HOLECULE TYPE: Protein
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15181A REGISTRATION NUMBER: 31,215
REPERREADOCKET NUMBER: 0151
TELECOMMUNICATION INFORMATION:
TELECHONS: 1215-460-9206
TELECRA: 215-540-5818
INFORMATION POR SED ID NO: 2:
SEQUENCE CHARACTERASTICS:
LENGTH: 794 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: mino acid
MULECULE TYPE: protein
US-08-745-880-2

Query Match 10.1%; Score 78.5; DB 2; Length 794; Best Local Similarity 25.3%; Pred. No. 9.7; Matches 39; Conservative 18; Mismatches 46; Indels 51; Gaps 1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTMTRVLQGVLPAL- 53

13;

108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136

US-08-745-880-4

Sequence 4, Application US/08745880

Patent No. 556455

CEMERAL INFORMATION:
APPLICAMT: Bark philip J.
APPLICAMT: Bark philip J.
APPLICAMT: Randon Readel J.
APPLICAMT: Would pusous particle
APPLICAMT: Wealey Louise
APPLICAMT: Wonly Day J.
APPLICAMT: Wonly Day J.
APPLICAMT: Wasley Louise
APPLICAMT: Wonly Day J.
APPLICAMT: Wonly Day J.
APPLICAMT: September September September September September J.
CORRESPONDENCES: APPLICAMTION: Expression of PacE in Host Cells and
TITLE OF INVENTION: Expression of PacE in Host Cells and
TITLE OF INVENTION: Methods of Use Thereof
NUMBER OF SEPURCES: APPLICAMTION: Expression
CORRESPONDENCE ADDRESS:
ADDRESSEE: Borson & Howson
STREET: Spring House Corporate Center, P.O. Box 457
CONTRY: OF 19477
COMMITTER OF 19477
COMM

COMPUTER READABLE FORM:
MEDIUM TIPE: Floppy disk
COMPUTER: IBM PC compatible
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION INTER: US/08/745,880
FILING DATE: 08-NOV-1996
FILING DATE: 09-NOV-1990
FILING DATE: 09-NOV-1990
PRIOR APPLICATION NUMBER: US 07/621,092
FILING DATE: 26-NOV-1990
PRIOR APPLICATION NUMBER: US 07/626,859
FILING DATE: 26-NOV-1990
PRIOR APPLICATION NUMBER: US 07/626,859
FILING DATE: 29-NOV-1990
FILING DATE: 29-NOV-1990
FILING DATE: 29-NOV-1990
FILING DATE: 29-NOV-1990

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575 PECLPVPPESSGCKTLTSS-----QACVVCEEGFSLHQKSCVQHCP-------PGFA 619
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10.11; Score 78.5; DB 2; Length 794;
Best Local Similarity 25.34; Pred. No. 9.7;
Matches 39; Conservative 18; Hismatches 46; Indels 51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANI: Wong, POLIY A.

APPLICANI: Wansary, Journal
APPLICANI: Wong, Polity A.

TITLE OF INVENTION: Expression of PACE in Host Cells and
TITLE OF INVENTION: Expression of PACE in Host Cells and
TITLE OF INVENTION: Hethods of use Thereof
Numbers of SEQUENCES: 7

CORRESPONDENCE ADDRESS:
ADDRESSEE: Howson & Howson
STREET: Spring House Corporate Center, P.O. Box 457
CITY: Spring House Corporate Center, P.O. Box 457
CITY: Spring House Corporate Center, P.O. Box 457
CITY: Spring House
CONFUTER READABLE FORM:
MEDIUM TIVER: TIBM PC Compatible
COMPUTER: TIBM PC COMPATION FAISE
CHARRET APPLICATION DATA: 1995
CLASSIFICATION: 435
CLASSIFICATION: 435
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      PRIOR APPLICATION DATA:

APPLICATION NUBER: 0S 07/621,443

FILING DATE: 39-NOV-1990

PRIOR APPLICATION NUBER: 0S 07/621,457

APPLICATION NUMBER: 0S 07/621,457

APPLICATION NUMBER: 0S 07/621,457

APPLICATION NUMBER: 13,215

REGISTAATION NUMBER: 31,215

REGISTAATION NUMBER: 31,215

REGISTAATION NUMBER: 31,215

REFERENT INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION NUMBER: 615181A

TEL
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PRIOR APPLICATION AND APPLICATION NUMBER: US 07/885,972
FILING DATE: 20-MAY-1992
APPLICATION WHOERE: US 07/621,092
FILING DATE: 26-WOY-1990
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Brake, Anthony J.
Kaufman, Rnadal J.
Tekamp-Olson, Patricla
Wasley, Louise
Wong, Polly A.
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US-00-400-382-4
; Sequence 4, Application US/08480382
; Patent No. 5986079
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
US-08-480-382-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              620 PQVLDTHYSTENDV -- ETIRASVC ------APCHASCATCQGPALTDCLSCPSHA 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTMTRVLOGVLPAL- 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       *** ACPUICANT: Wong, Polly A. TITLE OF INVESTIGNE SAFETS OF PACE IN HOST Cells and TITLE OF INVESTION: Expression of PACE in Host Cells and NUMBER OF SEQUENCES: TORRESPONDENCES.

*** ADDRESSE: Howson & Howson STREET: Spring House Corporate Center, P.O. Box 457 CITY: Spring House Corporate Center, P.O. Box 457 CITY: Spring House Corporate Center, P.O. Box 457 COUNTY: USANTE: USANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Merry Match 10.14; Score 78.5; DB 2; Length 794; Best Local Similarity 25.34; Pred. No. 9.7; Matches 19; Conservative 18; Mismatches 46; Indels 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  667 SLDPVEQTCS----RQSQSSRESPPQ-QQPPRLP 695
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/621,457
FILING DATE: 30-NOV-1990
ATTORNEY/ACBYT INFORMATION:
NAME: BAK MATY E.
REGISTRATION NUMBER: 31,215
REPERMER/COCKET NUMBER: G15181A
TELECOMMULATION INFORMATION:
TELEPHONE: 215-540-9206
TELEPHONE: 215-540-9206
TELEPHONE: 215-540-9206
TELEPHONE: 215-540-9206
TELEPHONE: 215-540-9206
TELEPHONE: 215-540-9206
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PRIOR APPLICATION DATA.
APPLICATION NUMBER: US 07/885,972
FILLIG DATE: 20-MX-1992
FILLING DATE: 26-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JMBER: US 07/620,859
29-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/480,382
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Barr, Philip J.
APPLICANT: Barke, Anthony J.
APPLICANT: Kaufman, Rnadal J.
APPLICANT: Tekamp-01son, Particia
APPLICANT: Wasley, Louise
APPLICANT: Wong, Polly A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/08480382
Patent No. 5986079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-745-880-4
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16,579

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Owery Watch
10.11; Score 78.5; DB 2; Length 794;
Best Local Similarity 25.34; Pred: NO. 9.7;
Matches 39; Conservative 18; Mismatches 46; Indels 51; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTWTRVLQGVLPAL- 53
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APPLICANT: van de Ven, Willen Jan Marie, Milhelmina;

APPLICANT: van den Ouveland, Anne Marie Wilhelmina;

APPLICANT: van den Ouveland, Anne Marie Wilhelmina;

APPLICANT: Robored, Antonius Johannes Maria; and

APPLICANT: Robored, Antonius Johannes Maria; and

TITLE OF INVENTION: Plan Manaceutical Composition Having An

TITLE OF INVENTION: Endoproceolytic Activity; A Process for

TITLE OF INVENTION: Endoproceolytic Activity; A Process for

TITLE OF INVENTION: Production of Proteins (Grecursor)

TITLE OF INVENTION: Production of Proteins

CORRESPONDENCES: 12

CORRESPONDENCES: 12

ADDRESSEE: HOFFWANN & BARON, LLP

STREET: 35, Jeffon Turnple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DAIL.
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Tran, 2691Ca H.
REGISTRATION NUMBER: 40,846
REFERENCE/DOCKET NUMBER: 294 41 DIV II/CON
REFERENCE/TOOKET NUMBER: 295 441 DIV II/CON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
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CURERNY APPLICATION DATA:
FILING DATE: Unassigned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGULT. 100-25-884-2
5-8quence 2, Application US/09253854
Patent No. 613210.
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STATE: New TORK
COUNTRY: U.S.A.
COMPUTER: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FOC COMPALIBLE
OPERATING SYSTEM: PC-DOS/MS:DX
                                                                                                                                                                                                  TELEPHONE: (212) 977-9550
TELEPHONE: (212) 977-9550
TELEFA. (212) 977-950
TELEFA. (212) 97-950
TELEF
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(516) 822-3582
            NTTORNEY/AGENT INFORMATION:
NAME: Moran, Thomas F.
REGISTRATION NUMBER: 16,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-07-849-420-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           620 PQVLDTHYSTENDV--ETIRASVC-----APCHASCATCQGPALTDCLSCPSHA 666
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APPLICANT: van den Ouveland, Anna Maria Wilhelmina
APPLICANT: van den Ouveland, Anna Maria Wilhelmina
APPLICANT: van outjinhoven, Johannes Lambertus Petrus
APPLICANT: Moning, Piet Mico Maria
APPLICANT: Moning, Piet Mico Maria
TITLE OF INVERTION: Piet Mico Maria
TITLE OF INVERTION: Endoproteolytical Composition Having An
TITLE OF INVERTION: Production of Processing (Precursor)
TITLE OF INVERTION: Production of Processing (Precursor)
TITLE OF INVERTION: Production of Processing (Precursor)
TITLE OF INVERTION: Production of Processing
TITLE OF INVERTION: Producti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
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REDIUM TYPE: PLOPPY disk
COMPUTER: ISM PC COMPALIA-DOS
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: PALEDETIN RELEASE #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/849,420
FILING DATE: 119920624
PRIOR APPLICATION DATA:
APPLICANTON NUBBER: US 07/620,859
FILING DATE: 19-NOV-1990
FILING DATE: 19-NOV-1990
APPLICATION NUBBER: US 07/621,443
FILING DATE: 29-NOV-1990
PRIOR APPLICATION DATA:
FILING DATE: 10-NOV-1990
ATTORNEY/AGBRT INFORMATION:
NAME: BAK, MATY E.
REGISTRATION NUMBER: 13,215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 142
US-07-849-420-2
Sequence 2, Application US/07849420
Patent No. 5898956
GENERAL INFORMATION:
APPLICANT: van de Ven, Willem Ja.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKEY NUMBER: 31,21:
REFERENCE/DOCKEY NUMBER: GI
TELECOMMUNICATION INFORMATION:
FELEPHONE: 215-540-6076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELERAN: 135-40-5819
| INFORMATION FOR SEQ 10 NO: 4:
| SEQUENCE CHARACTERISTICS:
| LENGTH: 794 anino acids
| TYPE: anino acids
| TYPE: anino acids
| TOPOL/GY: linear - WOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
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40 PTMTRVLQGVLPALPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTT 99
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                                                                                                                                              SEGURATE A PERIORITON US/U9095443

GENERAL INFORMATION:
GENERAL INFORMATION:
FALLICANT: PELGS, ELOT
TITLE OF INVENTION: DIAGNOSIS AND TREATHENT
TITLE OF INVENTION: OF ALP RELATED DISORDERS
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: SILE 4700
CITY: Los Angeles
STATE: California
CONTRY US.A.
TIT: SONTER EACHER FORM:
WEDIUN TYPE: 3.5 Diskette, 1.44 Mb
WEDIUN TYPE: STOORGE
OFFERTING SYSTEM: IBM P.C. DOS 5.0
CURRENT APPLICATION NUMBER: US/09/095,443
FILING DATE: HETCHICK DATE:
CLASSIFICATION NUMBER: US/09/095,443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100 OCGCPKDHPLTCDDPRFQDSSSSKAPPPSL-PSPSRLPGP 138
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA;
APPLICATION NUMBER: 60/049,477
FILING DATE: June 12 (1997
ATTORNEY AGENT INFORMATION:
NAME: ABTOURY, RICHARD 3,2327
RESISTEATION NUMBER: 3,235/055
TELEDROWN TON TON TON TON TELEBROWET ON THE PRINCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        235/055
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Culouscou, Jean-Michel
Shoyab, Mohammed
Siegall, Clay B.
                                                                                                                            Application US/09095443
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Sequence 8, Application US/08484438
Patent No. 5811098
Patent No. 5811098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELERHONE: (213) 489-1600
TELERA: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHRACTERISTICS:
LENTH: 1274 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: single
TOPOLOGY: linear
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MOLECULE TYPE: peptide
US-09-095-443-2
                                                                                                          09-095-443-2
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CHERALL INDURATION

CHERALL INDURATION

CHERAL INDURATION

CHERALL STREET SOURCE OWNERS AND MATERIAN HILDERINA

APPLICANT: VAN DUIJANDONE, JOHANNES LAMBETUS PETUS

APPLICANT: KONING, PIET NICO WATIA

APPLICANT: KONING, PIET NICO WATIA

APPLICANT: KONING, PIET NICO WATIA

TITLE OF INVENTION: PARAMCENTICAL COMPOSITION HAVING AN ENDOPROTEOLYTIC

TITLE OF INVENTION: PARAMCENTICAL COMPOSITION AND FOR THE (MICRO)BIOLOGICAL

TITLE OF INVENTION: PREDUCTION OF PROTEINS

FILE REFERENCE: SEQUENCE LISTINGS 1-12 294-41 DIV/FMC

CURRENT FILING DATE: 1935-66-12

EARLIER FILING DATE: 1935-66-12

EARLIER FILING DATE: 1935-66-12

EARLIER FILING DATE: 1935-66-12

EARLIER FILING DATE: 1932-66-34

EARLIER FILING DATE: 1932-66-34

EARLIER FILING DATE: 1932-66-34

EARLIER FILING DATE: 1932-66-34

EARLIER FILING DATE: 190-10-21

WHOREN OF SED ID NOS: 12

SOSTHARE: PATENTIN VALUE: 20

SOSTHARE: PATENTIN VALUE: 20

LEWING DATE: 20-10-21

LEWING DATE: 20-10-21
                                                                                                                                                                                                                                                                                         Query Match 10.1%; Score 78.5; DB 4; Length 794; Beat Local Similarity 25.1%; Pred. No. 9.7; Beat Local Similarity 25.1%; Pred. No. 9.7; Gaps 13; Matches 7; Conservative 18; Mismatches 46; Indels 51; Gaps 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          575 PEGLPVPPESSGCKTLTSS-----QACVVCEEGFSLHQKSCVQHCP-------PGFA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      54 POVYCNY----RDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCR-RSTTDCGGPKDH- 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    575 PEGLPVPPESSGCKTLTSS-----QACVVCEGFSLHQKSCVQHCP-------PGFA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           620 PQVLOTHYSTENDV--ETIRASVC------APCHASCATCQGPALTDCLSCPSHA 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   54 POVYCNY----RDVRFESIRLPGCPRGVNPVVSYAVALSCOCALCR-RSTIDCGGPKDH- 107
                                                                                                                                                                                                                                                                                                                                                                                                       1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTNTRVLQGVLPAL- 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTNTRVLOGVLPAL- 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                667 SLDPVEQTCS----RQSQSSRESPPQ-QQPPRLP 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
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US-08-955-424-2
; Sequence 2, Application US/08955424
; Patent No. 6274365
; GENERAL INFORMATION:
de Ven, Willem Jan Ma
TELEX:
INFORATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 794 anino acids
TYPE: anino acid
TYPE: anino acid
TYPE: anino acid
TOPOLOGY: linear
HOLECULE TYPE: protein
US-09-253-654-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-955-424-2
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38; Indels 19;

METHODS OF USING SAME

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1534 PTAKAPTCGLCEVARLRQNADQCCPEYECVCDPVSCDLPPVPHCERGLQPTLT----- 1586
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 PSKEPLRPRCRPINA-TLAVEKEG------CPVCI----TVNTTLCAGYC 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40 PT-----MTRVLQGVLPALPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSC 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match

Query Match

9,7%; Score 75; DB 4; Length 419;
Best Local Smilarity 21:9%; Pred. No. 10;
Matches 42; Conservative 12; Mismatches 72; Indels

Matches 42; Conservative 12; Mismatches 72; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INPORMATION:
APPLICANT: SPERA, PARTICIA G.
APPLICANT: WONTGOMERY, REDECCA I.
TITLE OF INVENTION: HERPES VIRUS ENTRY RECEPTOR PROTEIN
FILE REPRENDACE: 0.290-1.
CURRENT APPLICATION NUMBER: US/08/509,024B
NUMBER OF SEQ. ID NOS: 7
SOFTWARE: Patentin Ver. 2.0
SEQ IR NO 7
LENGHY 119
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                                                                                                                                                                                                                                                  STATE: New Tork
STATE: New Tork
COUNTRY: USA
COUNTRY: USA
COMPUTER: New Tork
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IN PC COMPALIA
COMPANIA
SYSTEM: PC-DOS/MS-DOS
SOFTHARE: No. 5645356mber 30, 1994
ATTORNEY/AGERT INFORMATION:
NAME: WHILE JOHN P. B. 678
REGISTRATION NUMBER: 26,678
REGISTRATION NUMBER: 36537-B2
TELECOMMUTICATION INFORMATION:
TELEPHONE: 121-276-0400
TELEPHONE: 21-391-0525
                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: John P. White
STREET: 1185 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 7, Application US/08509024B Patent No. 6291207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION POR SEQ ID NO: 2: SEQUENCE CHARACTERISICS: EDNOTH: 2050 amino acid Type: amino acid Type: amino acid Type: Inneat Type: protein (G-08-347-594A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-509-024-7
                   FITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 148
US-08-509-024-7
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APPLICANT: Garfinel, Lanar
TITLE OF INVENTION: WILLEBRAND FACTOR GPID BINDING DOMAIN POLYPEPTIDES AND
TITLE OF INVENTION: WILLEBRAND FACTOR GPID BINDING DOMAIN POLYPEPTIDES AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               511 CHOLCARRALLGSGPTQCVNCSQFLRGQBCYEECRVLQGLPREYVNARHCLPCHPECQPQ 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 9.7%; Score 75.5; DB 2; Length 1255; Best Local Similarity 26.3%; Pred. No. 31; Mismatches 47; Indels 47; Gaps Matches 18; Conservative 13; Mismatches 47; Indels 47; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          571 NGSVTCFGPEADQCVACAHYKDPPFCVAR---CPSGVKPDLSYMPIWKFPDEEGACQPCP 627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10 CRPINATLAVEKEGCPVCITVNTICAGYCPTMTRVLQGV....-LPALPQ.... 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        56 ------SCQ-CA PROVREESIRLPGCPRGVNPVVSYAVAL-----SCQ-CA 92
APPLICANT: Hellstr m, Ingegerd
APPLICANT: Hellstr m, Karl E.
TTLLE OF INTENTION: HERM HUMAN RECEPTOR TYROSINE KINASE
NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                              CITY: New York
STATE: New York
CONTRIE: 0.5.A.

ZIP: 100.96.7711
ZIP: 100.96.7711
ZIP: 100.96.7711
ZIP: FICHOPY disk
COMPUTER: IM PC COMPATELLE
OFFRATER: PATER! PC COMPATER: PATER! PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 530

CLASSIFICATION: 530

PRICOR APPLICATION NUMBER: 08/32/42

RILING DATE: 11-CT-1993

CLASSIFICATION NUMBER: 08/150,704

FILING DATE: 10-WOV-1993

CLASSIFICATION NUMBER: 05 07/981,165

FILING DATE: 10-WOV-1993

CLASSIFICATION NUMBER: 05 07/981,165

FILING DATE: 10-WOV-1993

ATTORNEY-AGRY INFORMATION: 21-GASIFICATION NUMBER: 18,872

REFERENCE/POCKET WUMBER: 5624-230

TELECOMUNICATION INFORMATION: 07 10-09-09-09

TELECASIFICATION NUMBER: 10,873

TELECASIFICATION NUMBER: 10,8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/484,438
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93 L-CRRSTIDC---GGPKDH---PLT 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     628 INCTHSCVDLDDKGCPAEQRASPLT 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/08347594A
Patent No. 5849536
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: unknown; MOLECULE TYPE: protein US-08-484-438-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 147
US-08-347-594A-2
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California

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59 NYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALC....-RRSTTDCGG 103
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 PSKEPLRPRC -- RPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVC 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
9.61, Score 14.5; DB 2; Length 539;
Best Local Similarity 2.31, Pered. No. 15;
Matches 36; Conservative 11, Mismatches 49; Indels 59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION

APPLICANT: ARTELL, CATHERINE L.

APPLICANT: MATCH, FRANCIA H.

APPLICANT: TARKONIE, FRANCIA H.

APPLICANT: TARKONIE, PROCHAL

TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH

TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH

TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH

TITLE OF INVENTION: PLACENTAL

CORRESPONDENCES: 12

CORRESPONDENCES: 12

CORPUTER: 1040 De Havilland Drive

CITY: Thousand Oaks

STATE: California

CONFUTER: 1050

COMPUTER: 1050

                          CURRING TO STATE THE CONFIDENCE OF THE CONFUTER INCOMPUTER IN IN PC COMPACTION OF STATE OF THE PLANTING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Pacentin Release #1.0, Version #1.30 CURRENT APPLICATION DAY: 18.008/715,041A FELLING DAY: 22-CT-1996 CLASSIFCATION: 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104 PKDHPLTCDDPRFQDSSSSKAP -- PPSLPSPSRLP 136
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                                                                                                                                                                                                                                                                                                                                                                                                                             ATORNET AGENT INFORMATION:
NAME: MAZZA, RICIPLAT J. 1, 657
REGISTRATION NUMBER: 27, 657
REFERENCE FOCKET NUMBER: A-4,
TELECOMOUNICATION INFORMATION:
TELECOMOUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27,657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 539 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-735-041A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              805.499.67
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US-09-190-476B-2
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                                                                                                                                                                                                                                                                                                               99 TDCGGPKDHPLTCDDPRPQDSSSSKAPP-----P 127
                                                                                                                                                                                                                                                                                                                                                                                         143 TSSPGQR----VQKGGTESQDTLCQNCPPGTFSPNGTLEECQHQTKCRIHKTVAPSTCSKP 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99 TDCGGPKDHPLTCDDPRFQDSSSKAPP-----P 127
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Owery Match 9.7%; Score 75; DB 4; Length 419;
Best Local Similarity 21:9%; Pred. No. 10;
Matches 42; Conservative 12; Mismatches 72; Indels 66; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49 VLPALPQVVCN----YRDVRFESIRLPGCPRGVNPVVSYAVALSC-----OCALCRRST 98
1 PSKEPLRPRCRPINATLAVEKEGCP------VCITVNTTICAGYCPTMTRV--LQG 48
                                                         33 PCYAPALPSCK--EDEYPVGSECCPKCSPGYRVKEAGGELTGTVCEP-CPPGTYIAHLNG 89
                                                                                                                                                  49 VLPALPQVVCN----YRDVRFESIRLPGCPRGVNPVVSYAVALSC-----QCALCRRST 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PSKEPLRPRCRPINATLAVEKEGCP------VCITVNTTICAGYCPTMTRV--LQG 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33 PCYAPALPSCK -- EDEYPYGSECCPKCSPGYRVKEACGELTGTVCEP - CPPGTYIAHLNG 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 149
US-09-333-279-7
US-09-333-279-7
Sequence 7. Application US/09333279
Patent No. 630336
CENERAL INFORMATION
APPLICANT: SPEAR, Patricia G.
APPLICANT: MONTOOMERY, Rebecca I.
TITLE OF INVENTION HRRES VIRUS ENTRY RECEPTOR PROTEIN
FILLE REPERENCE: 0200-1
CURRENT PAPLICATION NUMBER: US/09/333,279
CURRENT FILLNO BATE: 1999-06-15
SOFTWARE: PATRICIAN BATE: 1999-06-15
SOFTWARE: PATRICIAN DATE: 1999-06-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Farrell, Catherine L.
APPLICANT: Martin, Francis H.
APPLICANT: Wartin, Frachel
TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH
TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH
WORRER OF SEQUENCES. 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Amgen Inc.
STREET: 1840 De Havilland Drive
CITY: Thousand Oaks
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/08735041A Patent No. 5914251 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       128 SLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200 TCPPPELLGGPS 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
US-09-333-279-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          : | | | ||||
200 TCPPELLGGPS 211
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US-08-735-041A-2
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us-09-813-398-3.default.rai

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| PRILICATION NUMBER: 18 06/735,041 | ESCRIPTION NUMBER: 12 007-1366 | ESCRIPTION NUMBER: 12 007-13
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INFORMATION FOR SEQ ID NO:

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59 NYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALC------RRSTTDCGG 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              289 SW-----TSLQLGQLPEG-------CAECAAAPELAMGALELESRNSTLDPG- 328
                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Watch 9.61, Score 74.5, DB 3; Length 539; Best Local Similarity 23.74, pred. No. 15; Watches 36; Conservative 1]; Mismatches 49; Indels 59; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 PSKEPLRPRC - - RPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVC 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 9.6%; Score 74.5; DB 4; Length 539; Best Locats Similarity 23.2%; Pred. Mov. 15; Matches 36; Conservative 11; Mismatches 49; Indels 59; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 153
US-09-190-938B-2
US-09-190-938B-2
Sequence 2. Application US/09190938B
Fatent No. 6197939
GENERAL INFORMATION:
APPLICANT: Farrell, Catherine L.
HATLIC, Fencils H.
Yabkowitz, Rachel
TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH
FATTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 12
CORRESONDENCE ADDRESS:
ADDRESSER: ADDRESS:
ASTREET: 1480 De Havilland Drive
CITY: Thousand Oaks
CITY: Thousand Oaks
COUNTRY: USA
COUNTRY: USA
COMPUTER: ELFORM: WEDTOW THEE: FLORMY disk
KORPUTER: ISH PC COMPATIER
CORPUTER: ISH PC COMPATIER
CORPUTER: ISH PC COMPATIER
CORPUTER: ISH PC COMPATIER
CORPUTER: THOUSE COMPATIER

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         329 ------KPEMMKSPINTTPHVPAEGPEASRPP 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/190,938B
FILING DATE: 12-No. 6197939-1998
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single
TOPOLOGY: linear
NOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-190-938B-2
SEQUENCE CHARACTERISTICS:
LENGTH: 539 amino acids
TTFE: amino acids
STRANDENESS: siggle
TOPOLOGY: linear
NALECULE TIPE: protein
US-09-190-889A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY
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59 NYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALC ...----RRSTTDCGG 103
                                     52 ALPQVVCNYRDVRFESIRLP-GCPRGVNPVVS-----YAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   499 AFPATLSPGRTARLOELCAPDGAPPGVVPVLSAHSPSLGSEYFIRLE-EAAPAAGHDPDC 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      102 GG-PKDHPLTCDDPRFQDSSSSKA------PPPPSLP------SPS 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  558 AGCAPSPPATADQDDDSDGSTAASLAMEPLLGHGPPVDVPWGRGDHYPRRSLARDPLCPS 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45; Indels 39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match

9.6%; Score 74.5; DB 4; Length 1384;
Best Local Similarity 25.4%; Pred. No. 44;
Matches 31; Conservative 10; Mismatches 45; Indels 39.
                                                                                                  104 PKDHPLTCDDPRFQDSSSSKAP--PPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PUGDE APPLICATION: 43.

PRIOR APPLICATION DATA.

APPLICATION UNBER: 60/031,675

ATOMNEY/AGENT IRRORANTION:

NAME: Warburg, AEChard J.

REGISTRAPION UNBER: 32,327

TELECOMMUNICATION UNBER: 229/182

TELECOMMUNICATION INPER: (212) 99-160

TELEPHONE: (213) 955-0440
                                                                                                                                       329 ------KPEMMKSPINITPHVPAEGPEASRPP 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSER: Lyon & Lyon
STREET: 331 West Fith Street
STREET: 340 West Fith Street
COMPUTER: California
COWNTRY: US.A.

ITP: 90071-206
COMPUTER: 3.5 Uskette, 1.44 Mb
WEDINY TYPE: 3.5 Uskette, 1.44 Mb
WEDINY TYPE: STREET
COMPUTER: 184 COMPUTER: 184 COMPUTER: 184 COMPUTER: 184 COMPUTER: STREET
COMPUTER: STREET
CORREMT APPLICATION DATA:
APPLICATION NUMBER: US.08 5.0
CURRENT APPLICATION NUMBER: US.08 976.255
FILING DATE: NO. 6115681ember 21, 1997
CLASSIFGATION: 435
                                                                                                                                                                                                                                                                                                                                                     APPLICANT: JODG, Keith E.
APPLICANT: Dioman, Gregory
TITLE OF INVENTION: KINASE GENES AND USES
OWHERE OF SOURCHES: 35
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                              Sequence 11, Application US/08976255
Patent No. 6136581
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 1384 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TOPOLOGY: linear
; MOLECULE TYPE: Protein
US-08-976-255-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           134 RLPGPS 139
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                           240 PARTPSSPRCSGHPVNFVLPA-----TMNAWHCP--CGTWKPPSTSSRPTSFQATS 288
                                                                                              59 NYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALC-----RRSTTDCGG 103
                                                                                                                                          289 SW-----TSLQLGQLPEG-------CAECAAAPELAMGALELESRNSTLDPG- 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 PSKEPLRPRC--RPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVC 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 9 6%; Score 74.5; DB 5; Length 539; Best Local Similarity 23.2% pred. No. 15; Marches 36; Conservative 11; Mismatches 49; Indels 59; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: COUNTRY: United States of America
APPLICANT: POSTAL CODE: 70701
APPLICANT: TELEBRONE NO: (512)499-4462
APPLICANT: TELEBRONE NO: (512)499-4462
APPLICANT: TELEBRONE NO: (512)499-462
APPLICANT: TELEBRONE NO: (512)499-462
APPLICANT: TELEBRONE NO: (512)499-462
APPLICANT: OF HOMERICAN OF THE EXPRESSION OF TITLE OF INVENTION: A BONE AND PROSTATE DERIVED GROWTH FACTOR OURBER OF EXQUENCES: 5
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 PSKEPLRPRC--RPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVC 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: P.O. MINOLY AND STREET: Texas COUNTRY: TOWN THE TOWN TYPE: FLOOPY GLAS COUNTRY: THE P.O. MODELLA COUNTRY: THE P.O. MODELLA COUNTRY: THE P.C. MODELLA COUNTRY: PATCHLING STSTEM: P.C. MODEL STREET: CONCURRENTLY HERBHITH CLASSING BATES: CONCURRENTLY HERBHITH
                                                                                                                                                                                                104 PKDHPLTCDDPRFQDSSSKAP--PPSLPSPSRLP 136
                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/283,701
FILING DATE.
CLASSIFICATION: O1-MOG-1994
ATTORNEY/AGENT INFORMATION:
NAME: SERTICAL GARY 3.
REPERSENCE/DOCENT WHREE: J4,430
REPERSENCE/DOCENT WHREE: THECOGNATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DDRESSEE: Arnold, White & Durkee TREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application PC/TUS9509261 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : 539 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : MOLECULE TYPE: protein
PCT-US95-09261-2
                                                                                                                                                                                                                                                                                                      RESULT 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE:
TELEFAX: (
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SEREMAL INTOMATION.

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SEREMAL SERIOR COPIETA

APPLICANT: COPIETA

APPLICANT: COPIETA

APPLICANT: COPIETA

APPLICANT: COPIETA

APPLICANT: COPIETA

TITLE OF INVENTION: Monoclonal Antibody to CEA, Conjugates Comprising Said

TITLE OF INVENTION: Monoclonal Antibody to CEA

CORRENT PELLON (NAMER: US)

STRICE REPRENCE: Monoclonal Antibody to CEA

CORRENT FILING DATE: 1999-10-29

SPRIOR APPLICATION WHORE: GB9701103.3

PRIOR FILING DATE: 1999-02-14

SPRIOR APPLICATION WHORE: CT/GB97/01165

FRIOR APPLICATION NUMBER: CT/GB97/01165

NUMBER OF SEQ ID NOS: 21

SEQ ID NO 24

LENTH 167

LENTH 167

LENTH 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 9:51; Score 73:5; DB 4; Length 167; Best Local Similarity 28:11; Pred: No. 5; New String S0; Conservative 9; Mismatches 62; Indels 57; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 PSKEPLRPRCRPINATLAVEKEGC------PVCITVNTTICAGYCPTMTRVLQGV-LP 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 PSVFPLAPCSRSTSGGTAA - - LGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLY 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FRATURE: Sequence: humanized 15-05-111-945-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Watch

Query Watch

9.5%; Score 73.5; DB 2; Length 84:

Best Local Similarity 38.3%; Pred. No. 2.3;

Matches 18; Conservative 5; Wismatches 21; Indels

Matches 18; Conservative 5; Wismatches 21; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Disketca
COMPUTER: IDIA COMPUTER: DOS
SOSTAME: ESASEDO WORSION 2.0
CURRENT APPLICATION DATA:
APPLICATION MADER: US/09/149,933
FILING DATE: Filed Herewith
RRIGH APPLICATION DATA:
APPLICATION MADER: US/09/149,933
FILING DATE: FILED HEREWITH
RELING PARE: FILED HEREWITH
APPLICATION NUMBER: 06,749
REGISTRATION NUMBER: 36,749
REGISTRATION NUMBER: 36,749
FILEDHOM TOWN NUMBER: 36,749
RETERRACEPORONE: 415-865-6156
INPORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 84 amino acids
STRAEDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 158
US-09-171-945-24
IS-09-171-945-24
Sequence 24, Application US/09171945
Patent No. 6277599
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
HWEDIATE SOURCE:
LIBRARY: GenBank
CLONE: 184479
US-09-149-933-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match 9.54; Score 73.5; DB 2; Length 84 Best Local Similarity 38.34; Pred. No. 2.3; No. 2.4; Indels Matches 18; Conservative 5; Mismatches 21; Indels
                                                                                                                         GERERAL INDRAMATION GERERAL INDRAMATION GERERAL INDRAMATION OF A PEPLICANT. GOIL, SULYA K.
APELICANT. GOIL, SULYA K.
APELICANT. GOIL, SULYA K.
APELICANT. HULTY, LYON E.
TITLE OF INVENTION: THONE S.
ADDRESS GONEROS:
CORRESPONDENCE ADDRESS:
ADDRESSE: INCYCE Pharmacceuticals, Inc.
STREET: 3174 POTTER DAILOR
COUNTY: US
COUNTY: US
COUNTY: US
COMPUTER: EMANALE FORM:
MEDIUM TYPE: DISKALTE
COMPUTER: IBM COMPAILIBLE
OFFRANTING STREET: US/OS
SOFTWARE: FEASIGN VORISION 2.0
CURRENT MOSTICES ILIAG HERWITH
PRICE APPLICATION NUMBER: US/OS/AT4,670
PRICE APPLICATION NUMBER:
FILING NAME.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     53 LPQ--VVCNYRDVRPESIRLPGCPRGVNPVV-SYAVALSCQCALCRR 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22 IPQFGLFSKYRTPNCSQYRLPGCPRHFNPVCGSDMSTYANECTLCMK 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Bandman, Olga
APPLICANT: Bandman, Olga
APPLICANT: Oll, SUYA K.
APPLICANT: WHITY, LYUN K.
APPLICANT: WHITY, LYUN K.
APPLICANT: WHITY, LYUN K.
WHOREN OF SEQUENCES: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSES:
They barmaceuticals, Inc.
STREET: 11/4 Porter Drive
CITY: Palo Alto
STATE: CA
COUNTRY: US
LIP: 94.304
COMPUTER FEADABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT. 137-5
105-109-149-933-5
2 Sequence 5, Application US/09149933-7
3 Patent No. 5398699 - 1 Patent No. 539879
             RESULT 156
0S-08-744-670-5
15 Sequence 5, Application US/08744670
2. Patent No. 5858710
3. GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING NATE:
ATTORNEY/GENT INPORMATION:
NAME: BILLINGS LACY J
REGISTRATION NUMBER: 35,749
REFERENCE/DOCKET NUMBER: PP-0
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
ILBNGTH: 84 annion acids
TTPE: maino acid
TTPE: maino acid
TTPE: maino acid
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBNARY: Generar
CHARACTERISTICS:
18479
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203 WARIGPUGAUVAFAILIAIVCYITQTRRKKNUTESPSFSAGDNPHULYSPEFRISGA--- 259
                                                                                                                                                                                                                                                                                                                                                                                                  76 ----GVNPVVSYA--VALSCOCALCRRSTIDCGGPK----DHPLICDDPRFQDSSSSKA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28 ITVNTT-----ICAGYCPIMTRVLQGVLPALPQVVCNYRDV-RFESIRLP--GCPR-- 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-665-647-5

Sequence 5. Application US/08665647

Sequence 5. Application US/08665647

Sequence 5. Application US/08665647

Sequence 5. Application US/08665647

Sequence 5. Application Sequence 5. Application:

Applicamy: Decourt Application Sequence 6. Application Sequence 6. Application Sequence 7. Application Sequence 7. Application Sequence 7. Application Sequence 7. Application Sequence 8. Sequence 7. Application Sequence 8. 
                                                                                                          Ouery Match 9:51; Score 73:5; DB 6; Length 318; Best Local Similarity 27:54; Pered. No. 10; Matches 52; Indes 27; Matches 52; Indes 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 9.5%; Score 73.5; DB 2; Length 43; Best Local Smilarity 22.4%; Pred. No. 15; Matches 46; Conservative 18; Mismatches 60; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   125 PPPSLPSPSRL 135
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; LENGTH: 318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Depty, Stephen
APPLICANT: Depty, Clive Graham
APPLICANT: Copie, Clive Graham
APPLICANT: Copie, Clive Graham
APPLICANT: Copie, Clive Graham
APPLICANT: Copie, Michael Derek
FITLE REPERENEE: Monoclonal Antibody to CEA, Conjugates Comprising Said
FITLE REPERENEE: Monoclonal Antibody to CEA
FILE REPERENEE: Monoclonal Antibody to CEA
CURRENT APPLICATION WINDER: 1998-10-29
CURRENT APPLICATION WINDER: 1998-10-29
FRIOR FILIKO DATE: 1998-10-29
FRIOR PRICATION WINDER: G99603405.7
FRIOR FILIKO DATE: 1997-02-14
FRIOR FILIKO DATE: 1997-02-04
FRIOR FILIKO DATE: 1997-03-04-29
FRIOR FILIKO DATE: 1997-04-29
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                                                                                       203 SLSSVVTVPSSSLGTQTYTCNVNHKPSNTKVDKRVE-LKTPLGDTTHTCPRCPEP---- 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels 57; Gaps
                                 52 ALPOVV------GCPRGVNPVVSYA 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 PSKEPLRPRCRPINATLAVEKEGC ----- PVCITVNTTICAGYCPTMTRVLOGV LP 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                52 ALPQVV-----GCPRGVNPVSYA 84
                                                                                                                                                                         85 VALSCOC-ALCRRSTTDCGGPR--DHPLTCDDPRFODSSSSKAPP--PSLESPSRLPG 137
118 --KGDTPPPCPR----CPEPR-SCOTPPPC--RRCEPRERSCOTPPPCPRCRAPELLG 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85 VALSCQC-ALCRRSTTDCGGPK--DHPLTCDDPRFQDSSSSKAPP--PSLPSPSRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE: FEATURE: ; O'THER INFORMATION: Description of Artificial Sequence: humanized 05.09:171-95-95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oubery Match 9.51; Score 73.5; DB 4; Length 306; Best Local Stallarity 28.18; Pred. NO. 9.9; Indels 57 Watches 50; Conservative 9; Wismatches 62; Indels 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: SUTCLIFFE, J. GERGOR
TITLE OF INVENTION: STRHEETICE POLYPEPTIDES CORRESPONDING
TITLE OF INVENTION: STRHEETIC POLYPEPTIDES CORRESPONDING
PROPERIORS OF PROTEINOIDS TRANSLATED FROM BRAIN SPECIFIC HENAS,
REDEPONS, METHODS AND INTENDICED USING THE SAME
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/07/476,961
FILING DATE: 07-TEB-190
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 56,620
FILING DATE: 03-3UN-1997
APPLICATION NUMBER: 316,136
FILING DATE: 21-JUL-1993
SEQ ID NO.5:
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 95, Application US/09171945
Patent No. 6277599
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No. 5242798
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APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
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APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Robert C.
APPLICANT: Bryant, Joseph
APPLICANT: Bryant, Joseph
TITLE OF INVENTION: METHODS OF PROMOTING HEMATOPOIESIS
TITLE OF INVENTION: USING DERIVATIVES OF HUMAN CHORIONIC GONADOTROPIN
INVESTED OF SEQUENCES, 26
CORRESPONDENCE ADDRESS:
FREET: 155 Avenue of the Americas
STREET: 155 Avenue of the Americas
CITT: New York
COMPURE: New York
COMPURE: USA
ZIP: 1004-2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     555 PSVFPLAPCSRSTSGGTAA--LGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLY 612
                                                                                                                                                                                                                                                                                                                                                      Query Match 9:5%; Score 73.5; DB 4; Length 716; Best Local Similarity 28.1%; Pred: No. 26; Conservative Watches 50; Conservative 9; Mismatches 62; Indels 57; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     613 SLSSVYTVPSSSLGTQTYTCNVNHKPSNTKVDKRVE-LKTPLGDTTHTCPRCPEP---- 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52 ALPQVV------GCPRGVNPVSYA 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 PSKEPLRPRCRPINATLAVEKESC------PVCITVNTTICAGYCPTMTRVLQGV-LP 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    85 VALSCQC - ALCRRSTIDCGGPK - - DHPLITCDDPRFQDSSSSKAPP - - PSLPSPSRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Description of Artificial Sequence: humanized US-09-171-945-125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
CORFATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                 APPLICATION NUMBER: PCT/GB97/01165
FILING DATE: 1997-04-29
HER: GB9609405.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-SEP-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18, Application US/08709924
Patent No. 5565133
GENERAL INFORMATION:
APPLICANT: Gallo. Behart
                                                                          TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTORNEY AGENT INFORMATION:
NAME: Misrock, S. Leslie
REGISTRATION NUMBER: 18,09
REFERENCE/DOCKET NUMBER: 8
ELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TLING DATE: 09
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TITE OF INVENTION: Antibody, and Their Therapeutic Use in an Adept System
TIE REFERENCE: WONCLORAL Antibody to CEA
REREM TAPPLICATION NUMBER: US/09/1/11,345
URREMT FILING DATE: 1939-10-39
                     170 QKDGLTQADKDTLDSLLQQVASVNPKDGTCTLQDCMYKSLQKDWPGYSEGDRQLLKRMLM 229
                                                                                                                                     230 RK----LCOPQNATIDSSPPREHGRSASPSQKRRIDFIDPLASKKPRISHFTQRAQPTLN 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 9.5%; Score 73.5; DB 4; Length 613; Best Local Similarity 28.1%; Pred: No. 2; Red 18.8; Matches 50; Conservative 9; Mismatches 62; Indels 57; Gaps
                                                                                       87 LSCQCALC--RRSTTDCGGPKDH--------PLTCDDPRF-------0DSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FLE OF INVENTION: Monoclonal Antibody to CEA, Conjugates Comprising FLE OF INVENTION: Antibody, and Their Therapeutic Use in an Adept S; REFERNCE: Monoclonal Antibody to CEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        52 ALPQVV-----GCPRGVNPVVSYA 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 PSKEPLRPRCRPINATLAVEKEGC ----- PVCITVNTTICAGYCPTMTRVLOGV-LP 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85 VALSCQC-ALCRRSTTDCGGPK--DHPLTCDDPRFQDSSSKAPP--PSLPSPSRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     257 --KSCDTPPPCPR----CPEPKSCDTPPPC--PRCPEPKSCDTPPPCPRCPAPELLGG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE: INFORMATION: Description of Artificial Sequence: humanized 05.09:011.0945-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1997-02-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: GB9609405.7
FILING DATE: 1996-05-04
                                                                                                                                                                                                                                                                                       RESULT 162
US-09-171-945-113
US-09-171-945-113
Sequence 113, Application US/09171945
Patent No. 6277599
CRNERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 125, Application US/09171945
Patent No. 6277599
                                                                                                                                                                                 122 SKAPPPS----LPSPSRLPGPSDT 141
                                                                                                                                                                                                                            286 GKLGAPNGHETLLPVPG--PTPSDT 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: GB9
PRIOR FILING DATE: 1997-02-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 131
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: MONOCLOUGH
CURRENT APPLICATION NUMBER
CURRENT FILING DATE: 1998
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RESULT 167

15.089.469-667-4

15.089.469-667-4

15.089.469-667

15.089.469-667

15.089.469-667

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15.089.469-667
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CORRESPONDENCE ADDRESS:
ADDRESSE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
CITT: New York
COUNTRY: USA
ZTATE: New YORK
COUNTRY: USA
ZTP: 10016-2711
COMPUTER READABLE FORM:
MEDITH TYPE: Floppy disk
COMPUTER: END FC COMPATIBLE
OWERATING STSTEM: FC COMPATIBLE
OWERATING STSTEM: FC COMPATIBLE
OWERATING STSTEM: FC COMPATIBLE
OFFRATING STSTEM: FC COMPATIBLE
OFFRATING STSTEM: PC COMPATIBLE
OFFRATING STSTEM: PC COMPATIBLE
CURSIFICATION NUMBER: US/OR/709,948
FTLIGATION NUMBER: US/OR/709,948
TTLIGATION NUMBER: US/OR/709,048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: WISTOCK, S. Leslie
REGISTRATION WIMBER: 18,872
REFERENCE/OCCKET NUMBER: 676
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (212) 869-9741/886
TELEX: 66141 PENNIE
INFERMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : NOLECULE TYPE: peptide US-08-709-948-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                      RESULT 165
US-08-709-925-18
US-08-709-925-18
IS Application US/08709925
Fatent No. 599781
Fatent No. 5
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Patent No. 6319504
GERERAL INFORMATION:
APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Joseph
APPLICANT: Lunacid: Iskandar, Yanto
TITLE OF INVERTION: BY ADMINISTRATION OF HIV INFECTION
NUMBER OF SEQUENCES: 26
                                                                                                              Gaps
                                    Query Match 9.44; Score 73; DB 2; Length 14; Back Local Stmllarity 100, Pred. No. 0.34; Indels Matches 14; Conservation 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY AGENT INFORMATION:
NAME: MISTOCK, S. Lessle
RECISTRATION NUMBER: 18,372
REFERENCE/DOCKET NUMBER: 8769-0
TELECOMONICATION INFORMATION:
TELEPRAN: (212) 790-5909
TELEPRAN: (212) 790-5909
TELEPRAN: (212) 790-5909
TELEPRAN: (212) 866-9741/8864
TELER: 6614 PENNIE
INFORMATION POS ESD ID NO: 18:
LENGTH: 14 AMINO ACIDS
TENGTH: 14 AMINO ACIDS
TENGTH: 14 AMINO ACIDS
TENGTH: 14 AMINO ACIDS
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                                                                                                                                                                          46 LQGVLPALPOVVCN 59
1111111111111
1 LQGVLPALPQVVCN 14
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US-08-709-948-18
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123 PRNETRVP-CSTVPVTTEVSXAGCTKTVLMNH--CSGSCGTFVMYSAKAQALDHSCSCCK 179
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PG-1996-12374-2
Sequence 2. Application PC/TUS9612374
GENERAL INFORMATION:
PTILE OF INVENTION: Herpes Virus Entry Mediator
TITLE OF INVENTION: Herpes Virus Entry Mediator
NUMBER OF SEQUENCE: 5
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
TETT: Chicago
STATE: 110 N. Stetson, Suite 4700
STATE: 1111nois
COUNTRY: U.SA.
TIP: 60601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               55 QVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGP 104
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                                                           55 QVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGP 104
                                                                                                                                  180 EEKTSQREV.----VLSCPNGGSLTHTYTHIESCQC-----QDTVCGLP 218
                                                                                                                                                                                                                                                               PCT-USS-07289-4
PCT-USS-07289-4
PCT-USS-07289-4
PCT-USS-07289-4
PCT-USS-07289-4
PCT-USS-07289-4
PCT-USS-07289-4
PCT-USS-07289-4
PCT-USS-0728-4
PCT-USS-0728-4
PCT-USS-0728-4
PCT-USS-0728-4
PCT-USS-0728-4
PCT-USS-0728-5
PCT-USS-0728-
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FILING DATE: 06-JUN-1995
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATORNEY AGENT INFORMATION:
NAME: PETTARO, CTEGOTY D.
REGISTRATION WINNER: 36.134
REFERENCE/DOCKET NUMBER: 32581
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 10.1994-1700:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 201-994-1700
TELEFEX: 201-994-174
INFORMATION FOR SEQ ID NO: 4:SEQUENCE CHARACTERISTICS:
LENGTH: 235 anaino acids
TYPE: anaino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TOPOLOGY: linear
; MOLECULE TYPE: protein
PCT-US95-07289-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Op
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 93%; Score 72; DB 1; Length 235; Best Local Similarity 25.5%; Pred. No. 10; 10. Headless 28; Conservative 11; Hismatches 51; Indels 20; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Owery Match 93%; Score 72; DB 4; Length 235;
Best Locael Similarity 25:5%; Pred. No. 10;
Matches 28; Conservative: 11; Hismatches 51; Indels 20; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 PSKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM-----TRVLQGVLPALP 54
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55 OVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGP 104
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Sequence 4. D. 633155

GENERAL INFORMATION:
PACE INFORMATION:
APPLICANT: Rosen.
APPLICANT: Rosen.
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Stewart 6 Olstein
STREET: 6 Decker Farm Road
CITY: Roseland
STATE: NJ
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPARATION OF THE STATE OF THE
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 235 amino acid
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 6 SEQUENCE CHARACTERISTICS: LENGTH: 235 amino acida TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Ferraro, Gregory
REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                           MOLECULE TYPE: protein US-08-469-667-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-224-110-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 168
US-09-224-110-4
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82 ----SYAVALSCOCALCRRSTTDCGGP----KDHPLTCDDPRFQDSSSSKAPPPSLPSPSR 134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63 VR------VNPVV-- 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 CRPINATLAVEKEGCPVCI-----TVNTTICAGYCPTWTRVLOGVLPALPQVVCNYRD 62
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US-08-029-170-16

Sequence 16, Application US/08029170

TITLE OF INVENTION: CLOANING AND FUNCTIONAL EXPRESSION OF TITLE OF INVENTION: CHOLECTSTOKININ RECEPTOR-ENCODING DNA NUMBER OF SEQUENCES: 32

CORRESPONDENCE: 1800 Diagonal Road, Suite 500

CITY: Alexandria

COUNTEST: 1800 Diagonal Road, Suite 500

CITY: Alexandria

COUNTEST: PORM: Read, Suite 500

STATE: Namandria

COUNTEST: PORM: Release 10, Version 41.25

CORPUTER: IS PROBAIL Release 11.0, Version 41.25

CORPUTER: PREADLIA USA:

CONFOURTER: PREADLIA USA:

CONFOURTER: PREADLIA USA:

CONFOURTER: PREADLIA USA:

SETLING DATE: 19930330

CLASSIPICATION NUMBER: US/08/029,170

FILING DATE: 11-ANG-1992

PRIOR APPLICATION NUMBER: US 07/228.033

FILING DATE: 11-ANG-1992

PRIOR APPLICATION NUMBER: US 07/286.033

FILING DATE: 11-ANG-1992

PRIOR APPLICATION NUMBER: US 07/286.033

FILING DATE: USANG-1992

PROBREMENTION NUMBER: US 07/286.1769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 9.3%; Score 72; DB 1; Length 452; B Best Local Similarity 22.1%; Pred. Mo. 21; Mo. 24; Matches 49; Indels Matches 49; Conservative 15; Mismatches 49; Indels
                                                                                APPLICATION ONLY

APPLICATION ONLY

PILITS DATE: 11.AGO-1992
ATTORNEY/AGENT INFORMATION:
NAME: BERT. Stephen.
REGISTRATION NUMBER: 29.768
REGISTRATION NUMBER: 29.768
REGISTRATION NUMBER: 40.399/166 NIHD
TELECOMMUNICATION INFORMATION:
TELEPRANCE (703)836-930
TELERAX: (703)836-930
TELERA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        135 L 135
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90 LSRCLQCQMCDPAMGLRATR.----NCSRTENAVCGCSPGHFCIVQDGDHCAACRRYA 142
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Best Local Similarity 24:5%, pred. No. 13;
Matches 38; Conservative 13; Mismatches 68; Indels 36; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33 PCIAPALPSCR--EDEYPVGSECCPKCSPGYRVKEACGELTGTVCEP-CPPGTYIAHLNG 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 PSKEPLRPRCRPINATLAVEKEGCP-----VCITVNTTICAGYCPTMTRV--LQG 48
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: WANK Stephen A PRICE AND FUNCTIONAL EXPRESSION OF TITLE OF INVENTION: CLOUDCYSTOKININ RECEPOR ENCODING DNA NUMBER OF SEQUENCES: 29
ADDRESSES: FOLEY & Lardner ADDRESSE: FOLEY & Lardner STREFT: 1800 Disconal Road, Suite 500
CITT: ALEXANDERIA ROAD A STREET: 1870 FIRST ADDRESSES FOLEY & LARCNER FIRST & 
COMPUTER READABLE FORM:

MEDION TYPES: Floppy disk
COMPUTER: INP FC compatible
OPERATING SYSTEM: PC COMPATIBLE
OFFATING SYSTEM: PC COMPATIBLE
OFFATING SYSTEM: PC COMPATIBLE
OFFATING SYSTEM: PC COMPATIBLE
CURRENT APPLICATION DATA:
FILING DATE: PRICHARIES PCT/US96/12374
FILING DATE: NUMBER: PCT/US96/12374
FILING DATE: NUMBER: PCT/US96/12374
FILING DATE: NUMBER: 33,268
REGISTRATION NUMBER: 33,268
RESTRENCE/COXCET NUMBER: NOR3446P020PC
FELEPROME: (312) 616-5400
FELEPROME: (312) 616-5400
FELERA: (312) 616-540
FELERA: (312) 616-5400
FELERA: (312) 616-5400
FELERA: (312) 616-5400
FELERA: (313) 616-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIALE: "USA
COUNTRY: USA
CURTER: USA
CUPTER: READABLE FORM:
MEDIUM TYPE: FLOPPY disk
COMPUTER: TBM PC COMPUTED:
COMPUTER: PETENTE READABLE FORM:
COMPUTER: TBM PC COMPATIBLE
COMPUTER: PETENTE IN RELEASE #1.0, Version #1.25
SOFTAME: PETENTE IN SIANGE RELEASE #1.0, VERSION #1.25
FILING DATE: 19920902
CLASSIFICATION 1436
CLASSIFICATION: 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99 TOCGGPKDHPLTCDDPRFQDSSSSKAPPPSLPSPS 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 143 TSSPGQR---VQKGGTESQDTLCQNCPPGTF-SPN 173
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Patent No. 5319073
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
; MOLECULE TYPE: protein
PCT-US96-12374-2
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FILING DATE:
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US-07-937-609-16
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48; Indels 78;

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APPLICARM: MERMICAL Cennady et al TITLE OF UNEWRING: ISOLATE AND MOLECULES ENCODING HUMAN PROTEASE PROTEINS, TITLE OF UNEWRING: USOLATE HUMAN PROTEASE PROTEINS, AND TITLE OF UNEWRING: USES THEREOF FILE REFERENCE: CLOOLITYON: USES THEREOF CURRENT FILE NEFERENCE: CLOOLITYON WHERE: US/09/920,048
CURRENT FILIG DATE: 2001-09-07
PRIOR APPLICATION NUMBER: 03/093913,019
PRIOR FILIAM DATE: 2001-03-22
NUMBER OF SEQ ID NOS: 4
SEQ ID NOS: 4
SEQ ID NOS: 4
LENGTH: 855
LENGTH: 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       58 CNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCG----GPKDHPLTCD- 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 750 COYRAAOSGPSERPGPP--------ORALLARGTKASALSFPAPPSRPLPPDP 794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 9.3%; Score 72; DB 4; Length 855; Best Local Similarity 28.1%; Pred. No. 44; Matches 77; Conservative 3; Mismatches 36; Indels 30; Caps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 175
US-00-227-362-3
US-00-227-362-3
Sequence 1.3 Application US/08327362
Patent No. 58112409:
REDERBAL HEROMATION:
APPLICANT: Grover Come Caticha, Douglas T. Carrell,
APPLICANT: William D. Odell, Jeanine T. Griffin, Sanjeev
ADRESSES: Thorpe, No. 5811249th 6 Western
STREET: 9035 South 700 East, Suite 200
COMPRES: Utah
ADRESSES: Thorpe, No. 5811249th 6 Western
STREET: Utah
COMPUTER: AST Advantage NB-SZO
COMPUTER: Mord Perfect 5.1
CURRENT APPLICATION NBTA:
FILING DATA
CARESTONION: ASS
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UG-09-920-048-2
Sequence 2, Application US/09920048
Patent No. 634552
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Alan J. Howarth
REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT
; ORGANISM: Human
US-09-920-048-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/09813819

Sequence 2, Application US/09813819

Breith No. 6294468

GENERAL INFORMATION:

TRILE OF INVENTION: ISOLATED HUMAN PROTEASE PROTEINS,

TILLE OF INVENTION: USES THEREOF

TILLE OF INVENTION: USES THEREOF

FILE REFERENCE: LOLO117

TURBER PELLCATION NUMBER: US/09/813,819

CURRENT PILING DATE: 2001-013-22

CURRENT PILING DATE: 2001-013-22

SOFTWARE: EastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       397 FMHRRFRQACLDICARC-----CPRPPRARPQPLPDEDP------PTPSIASLSR 440
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       337 VRMLLVIVLLFFLCWLPVYSVNTWRAFDGPGAQRALSGAPISFIHLLSYVSACVNPLVYC 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82 ----SYAVALSCQCALCRRSTTDCGGP---KDHPLTCDDPRRQDSSSSKAPPPSLPSPSR 134
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Best Local Similarity 22.1%; Pred. No. 21;
Matches 40; Conservative 15; Mismatches 48; Indels 78; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63 VR------VNPVV-- 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10 CRPINATIAVEREGCPVCI----TVNTTICAGYCPIMTRVLOGVLPALPQVVCNYRD 62
FILING DATE: 01-APR-1992
PRIOR APPLICATION DATE:

APPLICATION AUTHOR: US 07/831,248
FILING DATE: 07-FEB-1992
FILING DATE: 07-FEB-1992
MATORNEY AGENT INFORMATION:
NAME: BENT: Stephen A.
REGISTRATION UNDER: 40399/166 NIHD
FILECOMBUNICATION INFORMATION:
TELEPRAN: (703)83-409
FILERAN: (703)83-4109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               113 -DPRFQDSSSSKAPPPSLPSPS-----RLPGP 138
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; TYPE: PRT
; ORGANISM: Human
US-09-813-819-2
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US-09-813-819-2
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US-UW-7U9-924-12

Sequence 12, Application US/08709924

Patent No. 586813

Detent Callo, Robert C.

APPLICANT: Gallo, Robert C.

APPLICANT: Lunardillandar, Joseph No.

TITLE OF INVENTION: USING DERIVATIVES OF HUMAN CHORIONIC GONADOTROPIN

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS: 26

CORRESPONDENCE ADDRESS: 26

CORRESPONDENCES: 26

CORRESPONDENCES: 26

CORRESPONDENCES: 26

CORRESPONDENCES: 26

CORRESPONDENCES: 26

CORPUTER: 1135 Avenue of the Americas

CITY: No. 706-7211

COMPUTER: Rabballe PORM:

MEDIUM TYPE: PLOSOF AS:

COMPUTER: IN PC Compatible

COMPUTER: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION BATA:

APPLICATION: 514

APPLICATION: 514

APPLICATION: 514

APPLICATION: 514
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               397 MHRRFRQACLDTCARC-----CPRPRARPQPLPDEDP------PTPSIASLSRL 440
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9.21, Score 71.5, DB 1; Length 451;
Best Local Similarity 21.71, Pered. No. 24;
Marches 39; Conservative 18; Mismatches 46; Indels 77;
COUPTER READBLE FORM:
WEDLIN TYPE: Floppy disk
WEDLIN TYPE: Floppy disk
WEDLIN TYPE: Floppy disk
COUPTER: IEM PC COMPATIBLE
COUPTER: THEN PC COMPATIBLE
COUPTER: PETENTIN RELEASE #1.0, Version #1.30
SOUTHARE: PETENTIN RELEASE #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION HOWER: US/08/570,157
FILING DATE: 11-DEC-1995
CLASSIFICATION: 40.8
RESISTRATION: 40.8
REFERENCE/OCAFE NOMER: 30,162
REFERENCE/OCAFE NOMER: 30,38/109001
TELEPRATION NUMBER: 30,38/109001
TELEPRATION FOR SEV ID NO. 2:
FELENCHING SEV ID NO. 2:
SEQUENCE CHARACTERISTICS:
LEMOTH: 451 maino acids
TYPE: maino acids
TYPE: amino acids
TYPE: amino acids
TYPE: ATRANDENCE/CENTING
STRANDENCE/CENTING ACIDS
TYPE: ATRANDENCE/CENTING ACIDS
TYPE: ATRANDENCE/CENTING
STRANDENCE/CENTING
ST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-570-157-2
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US-08-709-924-12
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APPLICART: GGELL, WIlliam D.
APPLICART: GGELL, William D.
APPLICART: GGELL, William D.
APPLICART: GLOVER: Soliev
APPLICART: GLOVER: Soliev
APPLICART: GARCIEL, Owar
APPLICART: GARCIEL, Owar
APPLICART: GARCIEL, Owar
APPLICART: WOUGHS T.
APPLICART: WOODS, II, Marion L.
TITLE OF INVENTION: Chorionic Gonadotropin.Related Protein Activity
FILE REPERENCE: T199, 100 Construction WINDER: US(99/158,565
CURRENT FALLING DATE: 1999-09-22
CURRENT FALLING DATE: 1999-09-22
KARLIER PRILING DATE: 1994-10-21
KARLIER FILING DATE: 1994-10-21
SEQ. ID NOS: 5
SOCTAARR: WORTHERE CE 8:0
SEQ. TRANS OF THE WORTHERE CE 8:0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 9.2%; Score 71.5; DB 2; Length 78; Best Local Similarity 44.2%; Pred. No. 3.3; Matches 19; Conservative 3; Mismatches 20; Indels
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APPLICANT: ROPIO, Alan S.
APPLICANT: GELINDORN, MATLIN
TITLE OF INVENTION: ASSAY FOR NON-PEPTIDE AGONISTS TO
TITLE OF INVENTION: PEPTIDE HORNONE RECEPTORS
NUMBER OF SEQUENCES: 23
CORRESPONDENCES: 23
ADDRESSE: Fish & Richardson P.C.
STREET: 225 Franklin Street
CITY: Boston
COUNTRY: MAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60 YRDVRF-ESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
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TELEPHONE: (801)566-6633
TELEPHONE: (801)566-070
SEGUENCE CHARACTERISTICS:
TYPE: anino acid acids
TOPELOST: Ilnear
TOPELOST: Ilnear
TOPELOST: Ilnear
GREATISTICS: CHARACTERISTICS:
GREATISTICS: CHARACTERISTICS: CHARACTERI
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US-09-158-565-3
Sequence 3, Application US/09158565
Fatent No. 613939
GENERAL INFORMATION
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; ORGANISM: Xanthomonas maltophilia
US-09-158-565-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/08570157
Patent No. 5750353
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US-08-570-157-2
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GRNERAL INFORMATION:
APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Robert C.
APPLICANT: STATI, JOSEPh
APPLICANT: BY ALM JOSEPh
APPLICANT: EVERTHENT AND PREVENTION OF HIV INFECTION
TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOT
TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOT
TITLE OF INVENTION: EMANORIES:
ADDRESSES: Pennie & Emande Lip
STREET: New York
COUNTRY: NGW
I 1006
CONFUTER: RADABLE FORM:
MEDIAN TYPE: FLOPPY ALSA
CONFUTER: TEM PC COMPACTION ALSA
CONFUTER: DS-SEP 1996
CONFUTER: DS-SEP 1996
CLASSIFICATION HUMBER: US/08/709.948
FILLA DATE: OS-SEP 1996
CLASSIFICATION: 4.24
ATTORNEY/ADENT HEORAMATION:
MANBE: MISTOCK, S. Lesile
MANBE: MISTOCK, S. Lesile
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 181

182-08-12-870-7

18-08-12-870-7

18-08-12-870-7

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Best Local Similarity 100.0%;
Matches 14; Conservative 0
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-709-948-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERIS
LENGTH: 14 amino
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
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APPLICANT: GAILO, Robert C.

APPLICANT: GAILO, ROBERT C.

APPLICANT: GAILO, ROBERT C.

APPLICANT: GAILO, START, JOSEPH C.

APPLICANT: GAILO, START, JOSEPH C.

TITLE OF INVENTION: TRRATHENT AND PREVENTION OF CANCER BY

TITLE OF INVENTION: ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROPIN

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS: ADDRESSE: PADRESSE: ADDRESSE: ADDRESSE: ADDRESSE: CORPETE: New YORK

STREET: 1155 Avenue of the Americas

COMPTER: New YORK

STREET: 11036-2711

COMPUTER: READABLE FORM:

COMPUTER: INP C. COMPUTE: START MS STEET: PADRESSE: PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 9.18; Score 71; DB 2; Length 14; Best Local Similarity 100.04; Pred No. 0.53; Matches 14; Conservative 0; Mismarches 0; Indels
| REGISTRATION NUMBER: 18,872 | REPERENCE/CONCETT NUMBER: 8769-018 | TELECOMMUNICATION INFORMATION: TELEPRENCE: (212) 790-9990 | TELEPRENCE: (212) 869-9990 | TELEPRENCE: (212) 869-9990 | TELEPRENCE: (212) 869-9990 | TELEPRENCE: (212) 869-9990 | TELEPRENCE: (212) 869-9900 | TELEPRENCE: (212) 869-910 | TELEPREN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 9.1%; Score 71;
Best Local Similarity 100.0%; Pred. No.
Matches 14; Conservative 0; Mismatc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: peptide US-08-709-925-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 VLQGVLPALPQVVC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45 VLQGVLPALPQVVC 58
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APPLICANT: ANGLESON, MATILYO A.
APPLICANT: ANGLESON, MATILYO A.
APPLICANT: ANGLESON, Angela H.
APPLICANT: ALGERON, Angela H.
APPLICANT: Heach, ROYD L.
APPLICANT: Clarke, Addlesone E.
APPLICANT: PRECURSOR THEREOF AND GENETIC
TITLE OF INVENTION: SEQUENCES ENCODING SAME
TITLE OF INVENTION: SEQUENCES ENCODING SAME
CURRENT APPLICANTON WUMBER: US/09/431,500A
CURRENT APPLICANTON WUMBER: 08/4391.01
PRIOR FILITM DATE: 1999-10-01
WUMBER OF SED ID NOS: 16
SOFTWARE: PATENTIN VEY: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 54 DPRNPKACTLNCDPRIATGVCPRSEEKKNDRIC----TNCCAGTKGCKYFSDDGTFVCEG 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49 VL-PALPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTD-----C 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            49 VL-PALPOVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTD-----C 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 110 ESDPRNPK-----ACPRNCDPRIAYGI-----CPLAEEKKNDRICTNCC 148
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 EPLRPRCRPINATLAVEKEGCP-----VCITVNTTICAG-----YCPTWTRVLQG 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Watch 9:11; Score 71; DB 4; Length 368; Best Local Similarity 2:101; Pred No. 21; Vonstand No. 21; Conservative 11; Mismatches 52; Indels 52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 9.18; Score 71; DB 3; Length 368; Best Local Similarity 2.04; Pered. No. 21; Matches 33; Conservative 13; Mismatches 52; Indels 52; Matches 34; Conservative 13; Mismatches 52; Indels 52; Conservative 13; Mismatches 52; Matches 53; Matches 54; Matches 54; Matches 55; Matches 54; Matches 55; Matches 55; Matches 55; Matches 54; Matches 54; Matches 55; Matches 54; Mat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                102 GGPKDHPLTCDDPRF----QDSSSSKAPP 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102 GGPKDHPLTCDDPRF-----QDSSSSKAPP 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 183
US-09-431-500A-3
Sequence 3, Application US/09431500A
Spatent No. 6251821
CRNERAL INFORMATION:
                                                                         REFERENCE/DOCKET NUMBER:
TELECOMONICATION INFORMATIO
TELECHONE: (516) 742-436
TELERAX: (516) 742-436
TELERAX: 230 901 SANS NINFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 368 anino acidd
TYPE: anino acidd
TYPE: ACOPOLOGY: linear
MOLECULE TYPE: protein
US-08-454-295-3
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: LENGTH: 368
: TYPE: PRT
: OKCANISM: Nicotiana alata
US-09-431-5008-3
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APPLICANT: Anderson, Marilyn A.
APPLICANT: Anderson, Marilyn A.
APPLICANT: Clarke, Addela H.
APPLICANT: Clarke, Addelane B.
TITLE OF INVENTION: PROTEINAE INHIBITOR, PRECURSOR THEREOF AND GENETIC
NUMBER OF SEQUENCES: 14
ADDRESSES: Scully, Scott, Murphy & Presser
CORRESPONDENCE ADDRESS:
ADDRESSES: Scully, Scott, Murphy & Presser
STREET: 400 Cadden City Plaza
CITY: Carden City Plaza
CITY: Carden City Plaza
CITY: Carden City Plaza
CITY: Carden City Plaza
CONTR: Now YORK
COUNTR: United States of America
CONFUTER READABLE FORM:
MEDIUM TYPE: READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER READABLE PORM:
COMPU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 9.1%; Score 71; D8 1; Length 275;
Best Local Similarity 20:3%; Pred. No. 15;
Matches 7; Conservative 16; Mismatches 47; Indels 82; Gaps 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    208 GGFCSGVCHNLPGTFECICGPDSALARHIGTDCDSGKVDGGDSGSGEPPPSPTPGSTLTP 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  162 HRCQMFCNQ-----TACPADCDP----NTQASCECPEGYILDDGFICTDIDECEN 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92 -----ALCRR--STIDGGGPKDHPLT------CDDPRFQDSSSSKAPPPSLPSP-SRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 EPLRP-----RCRPINATLAVEKEGCPVCITVNTTICA-GYCPTMTRVLOGVLPALP 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           55 --- QVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCOC------ 91
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/312,870
FILING DATE: 14-99-4600
TELEPRAT: 14-99-4600
TELEPRAT: 14-99-4600
TELEPRAT: 14-99-4600
TELEPRAT: A1-99-4600
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Patent No. 6031087
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Digiglio, Frank S. REGISTRATION NUMBER: 31,346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
HOLECULE TYPE: protein
US-08-312-870-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                138 PS 139
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Query Match 9.1%; Score 71; DB 2; Length 498;
Best Local Similarity 20.3%; Pred: No. 30;
Matches 37; Conservative 16; Mismatches 47; Indels 82; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92 -----ALCRR--STTDCGGPKDHPLT-----CDDPRFQDSSSSKAPPPSLPSP-SRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 9.1%; Score 71; DB 6; Length 572;
Best Local Similarity 20.3%; Pred. No. 35;
Marches 37; Conservative 16; Mismatches 47; Indels 82; Gaps
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RPLICATION NUMBER: 05/07/506,325
FILLING DATE: 09-ARF-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No. 5256770 : APPLICANT: GLASER, CHARLES B.; MORSER, MICHAEL J.; LIGHT,
               STATE: Virginia
COUNTRY: UGA
121P: 2204-0747
CONDUTER: READALE FORM:
WEDIUM TYPE: Floppy disk
COMPUTER: IMP PC COMPATALIALE
OWNOPTER: IMP PC COMPATALIALE
OPPRATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/OB/N33,564
FILLING DATE: BG OCTOBER 1996
CLASSIFICATION: 514
ATTORNEY/AGENT THEORAMICS
ATTORNEY/AGENT THEORY
ATTORNEY/AGENT THEORAMICS
ATTORNEY/AGENT THEORY
ATTORNEY/AGENT THEORAMICS
ATTORNEY/AGENT T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: SVENSSON, LEGGRAG R.
REGISTATION UNBERE: 30,330
REFERENCE, DOCKET NUMBER: 30,136
RELEGGRAGICATION INFORMATION: 1TELEPHONE: (703) 205-8000
TELEPHONE: (703) 205-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAK: (703) 205-8000
TELEFAK: (703) 205-8000
TELEFAK: 24845.
TELEFAK: 24845.
TELEFAK: 4848 amino acids
TEMPTH: 498 amino ac
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; LENGTH: 572
5256770-7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92 -----ALCRR--STIDCGGPKDHPLT-----CDDPRFQDSSSSKAPPPSLPSP-SRLPG 137
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 EPLRP-----RCRPINATLAVEKEGCPVCITVNTTICA-GYCPTMTRVLQGVLPALP 54
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9.1%; Score 71; DB 1; Length 497;
Bost Local Smilarity 20.3%; Pred. No. 30;
Matches 37; Conservative 16; Mismatches 47; Indels
                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Thrombomodulia...
NUMBER OF SEQUENCES: 11
NUMBER OF SEQUENCES: 1
ADDRESSE: Richards, Medlock & Andrews
STREET: 1101 Elm Street, Suite 4500
CITY: Dallas Elm Street, Suite 4500
2 IP: 7370-1197
COMPUTER: TEADABLE FORM: Floppy disk
COMPUTER: TEADABLE FORM: Floppy disk
COMPUTER: TEADABLE FORM: STREET END FOR ST
Sequence 3, Application US/08312870
Patent No. 5639625
GENERAL THFORMATION:
APPLICANT: Carson, Craig W.
APPLICANT: Earnon, Charless T.
APPLICANT: Branon, Charless T.
TITLE OF INVENTION: Method for Detecting Antibodies to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/08733564
Patent No. 5916674
Patent INFORMATION:
APPLICANT: FUJINAAA. Renj1
APPLICANT: HOCHIDA, Satosh1
TITLE OF INVENTION: METHOD FOR TREATING LIVER INJURY
WHERE OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSE: Birch, Stewart, Kolasch & Birch, LLP
STREET: P.O. Box 747
CITY: Falls Church
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         138 PS 139
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US-08-733-564-2
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RESULT 191

Use 108-449-6

Use 108-4
Query Match 9.1%; Score 71; DB 6; Length 575; Best Local Similarity 20.3%; Pred: No. 35; Matches 37; Conservative 16; Mismatches 47; Indels 82; Gaps
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$146668 - $46668 - $46668 - $4000 - $466668 - $4000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $400000 - $40000 - $40000 - $40000 - $40000 - $40000 - $40000 - $400000 - $400000 - $400000 - $400000 - $400000 - $400000 - $400000 - $400000 - $400000 - $400000 - $400000 - $400000 - $400000 - $4000
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NUMBER OF SEQUENCES: 57
CURRENT APPLICATION DATA:
APPLICATION WHGBE: US/08/155,346
FILING DATE: 22-NOV-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 568,456
FLILNG DARE: 15-A0C-1990
APPLICATION NUMBER: 506,325
FILING DATE: 09-APR-1990
APPLICATION NUMBER: 406,941
FILING DATE: 13-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 345,374
FILING DATE: 28-APR-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; SEQ ID NO:6:
; LENGTH: 575
5466668-6
                                                                                                                               138 PS 139
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Best Local Similarity 20.3%; Pred. No. 35;
Matches 37; Conservative 16; Mismatches 47; Indels 82; Gaps 11;
                               92 -----ALCRR--STIDGGGFRDHPLI-----CDDFRFDDSSSSKAPPPSLPSP-SRLPG 137
448 GGFCSGVCHNLPGTFF1CTCDDSALARHIGTDCDSGKVDGDSGSGGSGPFPFFGFTFF 507
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GREEAL INCORMATION:

APPLICANT: Addrews, William H.

APPLICANT: Addrews, William H.

APPLICANT: Lielander, Laura R.

APPLICANT: Lielander, Laura R.

TITLE OF INVERTION: Compositions

TITLE OF INVERTION: Compositions

CORRESPONDENCE ADDRESS:

CORRESPONDENCE ADDRESS:

CORRESPONDENCE ADDRESS:

CITY: Pall ALIC

STREET 319 Infrom Ave.

CITY: Pall ALIC

CORPTERS: Call form

COMPTERS: Call form

COMPTERS: Call form

COMPTERS: The Compatible CORM:

REDIGHTER: The Compatible CORM:

COMPTERS: The Compatible CORM:

COMPTERS: The Compatible CORM:

COMPTERS: The Compatible CORM:

COMPTERS: The Compatible CORM:

APPLICATION NUMBER: US/08/170, 290A

CLASSIFICATION NUMBER: CT/US92/05573

CLASSIFICATION NUMBER: CT/US92/05573
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CLASSIFICATION: 435
ATTORNEY/CABAT INFORMATION:
NUMBER: Heasiln, James M.
REGISTRATION NUMBER: 29-541
REPERBACE/DOCKET NUMBER: 11972-58-1
TELEPHONE: 415-236-2420
IRFORMATION FOR EACH ID NO: 54:
SEQUENCE CHARACTERISTICS:
LENGH: 575 amin acids
TYPE: maino acid
TYPE: maino acid
STORELOGY: 11near
MOLECULE TYPE: protein
US-08-170-190A-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 129

05-08-170-290A-54

5 Sequence 54, Application US/08170290A

7 Patent No. 570291

7 GENERAL INFORMATION:

APPLICANT: Andrews, William H.
                                                                                                                                                                                                                        138 PS 139
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508 PA 509
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GREEAL INFREAL INFRANCANCY
APPLICANT: Landes Gregory M.
APPLICANT: Landes Timothy D.
APPLICANT: Concors Timothy D.
APPLICANT: Concors Timothy D.
APPLICANT: Concors Timothy D.
APPLICANT: Wan Saay, Tetence J.
APPLICANT: Wan Saay, Tetence J.
APPLICANT: William R.
APPLICANT: William R.
APPLICANT: William R.
APPLICANT: WILL OF INVENTION: COMPOSITIONS, METHODS OF MAKING AND USING SAME NUMBER OF SEQUENCES: 83
CORRESPONDENCE ADDRESS: 83
CORRESPONDENCE ADDRESS: 83
CORRESPONDENCE ADDRESS: 83
COMPUTER READABLE FORM
MEDIUM TYPE: Transhipham
STAME: Massachusetts
COMPUTER TRANABLE FORM: MODELAL FORM
MEDIUM TYPE: PLOPPY disk
COMPUTER TRANABLE FORM
MEDIUM TYPE: PLOPPY DIsk
COMPUTER TRANABLE FORM
MEDIUM TYPE: PLOPPY DIsk
COMPUTER TRANABLE FORM
MEDIUM TYPE: PACHILIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA: 435
FRILNG DATE: 17-JUN-1996
FRILNG ADDRESS: WANDERE: US 09-665.259
FRILNG DATE: 17-JUN-1996
FRILNG DATE: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         287 RCKPFYCDRPWQRATARESHACLAC-----SCNGHA--------RR 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63 VRF--ESIRLPGCPRGVNPVVSYAVALSCQ------CALCR-----RSTTD---CG 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373 ACDCHPVGAAGKTCNQTTGQCPCKDGVTGLTCNRCAPGFQQSRSPVAPCVKTP---IPG 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9 RC-----RPINATLAVEREGCPVCITVNTTICAGYCPTHTRVLGGVLPALPQVVCNYRD 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match
Best Local Similarity 23:54; Pred. No. 49;
Best Local Similarity 23:54; Pred. No. 49;
Best Conservative 9; Mismatches 42; Indels 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21, Application US/08762500 Patent No. 6030806 GENERAL INFORMATION:
ATORNEY AGENT INFORMATION:
NAME: DUGAN, DEBORTH A.
REGISTRATION NUMBER: 37,3
REFERENCE/OCKET NUMBER:
TELECOMMUNICATION INFORMATIO
TELECOMMUNICATION INFORMATIO
TELEPHONE: (508) 872-8405
INFORMATION FOR SEG ID NO: 21
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                       TYPE: amino acid
TOPOLOGY: 1'
                                                                                                                                                                                                                                                                                                                                                                      ; MOLECULE TYPE: protein
US-08-665-259-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        138 PSD 140
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429 PTE 431
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US-08-762-500-21
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Best Local Similarity 26.01; Pred: No. 25; Part Conservative 18: Mismatches 63; Indels 61; Gaps Matches 50; Conservative 18: Mismatches 63; Indels 61; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01 ---VSYAVALSCQCALCRRSTTDCG----GPKDHPLTCDDPRFQDSSSSKAPPPSLPSP- 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    65 SPDVTASALQGLHIAVHECQHQLRDQRWNCSALEGGGRLPHHSAILKRGFRESAFSFSML 124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40 -PTMT-RVLQGVLPALPQVVCNYRDVRFESIRLPG------CPRGVNPV----- 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Burn, Timothy C.
APPLICANT: Connors, Timothy D.
APPLICANT: Connors, Timothy D.
APPLICANT: Van Raay, Terence J.
APPLICANT: Van Raay, Terence J.
APPLICANT: VILLE OF INVENTION: NOVEL HOMAN C. ROMOSOME 16 GENES,
TITLE OF INVENTION: COMPOSITIONS, METHODS OF MAKING AND USING SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER: THE PC COMPATION:
CONFURER: THE PC COMPATION:
CONFURER: PETCHIT RELEASE #1.0, Version #1.30
SUFFRARE: PETCHIT RELEASE #1.0, Version #1.30
APLICATION NUMBER: US/08/665,259
FILING DATE: 17-JUN-1996
CLASSIFICATION: 435
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CHRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,449
                                                                                                                                                                                                                                                                               0296-20035.00
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COUNTRY: United States of America
11P: 01701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21, Application US/08665259
Patent No. 6028173
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CORRESPONDENCE ADDRESS:
ADDRESSEE: GENZYME CORPORATION
STREET: One Mountain Road
CITY: Framingham
                                                                                                               TOPOLOGY: linear
US-08-485-449-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                133 --- SRLPGPSDT 141
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182 PGSVPSPGPQDT 193
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Sequence J. Application US/08709948
Patent No. 619594
REBERAL INFORMATION:
APPLICANT CALLO. Robert C.
APPLICANT: Bryant, Joseph
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-709-924-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 196
US-08-709-948-3
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18-08-109-924-3

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8.9%; Score 69.5; DB 3; Length 580;
Best Local Similarity 23.3%; Pred No. 49;
Matches 43; Conservative 9; Mismatches 42; Indels 89; Gaps 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            287 RCKPFYCDRPWQRATARESHACLAC-----SCNGHA------RR 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63 WRP--ESIRLPGCPRCVNPVVSYAVALSCQ------CALCR-----RSTTD---CG 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          320 CRFNMELYRLSGRRSG------GVCLNCRHNTAGRHCHYCREGFYRDPGRALSDRRACR 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9 RC-----RPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRD 62
                                                                        REFERENCE/DOCKET NUMBER: INTELECOMMUNICATION INFORMATION TELEPHONE: (508) 872-8400
                                                                                                                                                                    INFORMATION FOR SEQ 10 NO. 21. SEQUENCE CHARACTERISTICS: LENGTH: 500 anino acids TYPE: amino acid COOLCCT: linear MOLECULE TYPE: protein US-08-76-5-50-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (212) 869-9741/86
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
NAME: Dugan, Deborah A. REGISTRATION NUMBER: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        138 PSD 140
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720 PNYDPLCSLCTCORRIVICDPVVCP-----PPSCPHPVQAPDQCCPVCPE----R 765
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 8.9; Score 69; DB 2; Length 954; Best Local Similarity 22.04; Peret. No. 96; Matches 37; Conservative 14; Mismatches 69; Indels 48;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100 D--CGGPKDHPLTCDDP-RFQDSSSSKAPP----PSLPSPSRLPGP 138
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Sequence 3, Application US/09130012A
PARAIR NO 5886056
RENEAL INPORATION:
REPLICANT
RECLE, Lisa Bard
APPLICANT
RECLE, Lisa Bard
APPLICANT
RECLE, Lisa Bard
APPLICANT
RECLE, Lisa Bard
APPLICANT
RECLES OF SEQUENCES:
ROBESSED ROSES
ADDRESSED GENERALS
STREE: 87 Cambridge
STATE: Masselle FORM:
COMPUTER RELABLE FORM:
MEDIUM TYPE: Floppy disk
CORRENT REPLICATION NUMBER: US/09/130,032A
FILING DATE: Mayort Lisa PRECLES CORPATIONS
CORPUTER: LISA PROCESSED CORPUTER
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REGISTRATION NUMBER: 32,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: protein
US-08-749-169A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , MOLECULE TYPE: protein US-09-130-032A-3
                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 198
US-09-130-032A-3
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TITLE OF INVENTION: TREATHENT AND PREVENTION OF HIV INFECTION
TITLE OF INVENTION: TREATHENT AND PREVENTION OF HIV INFECTION
THE OF INVENTION: TREATHENT AND PREVENTION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROF
CORRESPONDENCE ADDRESS:
TO ADDRESSE: Pennie & Edmonds LLP
STREET: 1155 Arenue of the Americas
STREET: 1155 Arenue of the Americas
STREET: New York
STREEN: New York
STREEN: New York
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THE NEW YORK
STREEN: NEW 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
CMCPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTHARE: Patcentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3, Application US/08749169A
Patent No. 5846770
GRERAL INFORMATION:
GRERAL INFORMATION:
APPLICANT: BACILE Lies
APPLICANT: DATALLE Edward
APPLICANT: DATALLE Edward
APPLICANT: DATALLE Edward
TITLE OF INVENTION: CORRIN COMPOSITIONS
NUMBER OF SEQUENCES: 8
CORRESSIONEDER TO ADDRESS:
ADDRESSIONEDER CAMBRICE:
STREET: 67 CAMBRICE COMPUTER: USA
COUNTRY: TETP. OTAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 8.9%;
Best Local Similarity 100.0%;
Matches 14; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
HOLECULE TYPE: peptide
US-08-709-948-3
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US-08-749-169A-3
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WESULT 200

WS-08-569-114-3

Sequence 3, Application US/08569214

Fatent No. 6155469

ERNEAL INFORMATION:

APPLICANT: MANN. BARBARA J.

APPLICANT: MANN. BARBARA J.

APPLICANT: MANN. BREARA J.

APPLICANT: MANN. BREARA J.

APPLICANT: WANN. BRECHINGS AND REAGANTS SPECIFIC FOR MEMBERS OF THE TITLE OF INVENTION: JOURNEY PRINT.

CORRESPONDENCE ADDRESS:

ADDRESSES:

APPLICANT: WASHINGTON AVENUE N.W., STE. 5500

STATE:

COMPUTER: RADABLE FORM:

WANN. STEEP: PLOPEN J.

COMPUTER: IBW FO COMPANDIBLE

SOFTWARE: PATENTINE REAGALE FORM:

WANN. SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PATENTINE REAGALE PATENTINE APPLICATION NATA.

CHING DATA WANN. BARBER: US/08/569,114
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                                                     99 TDCGGPKDHPLTCDDPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                   728 GKCIKGSDNSYSCVFEK--DKISSKSDNDICAEGSSLICPADT 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99 TDCGGPKDHPLTCDDPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
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RILING DATE:

PRIOR APPLICATION DATE:

PRIOR APPLICATION NUMBER: PCT/US94/06890

RELING DATE: IT-UNI-1994

ATTORNEY/AGENT IRROBANTION:

NAME: WIRASHIDER: ANTE H.

REFERENCE/DOCKET WINBER: 9148-0006.27

TELECOMUNICATION INFORMATION:

TELECOMUNICATION INFORMATION:

TELECOMUNICATION INFORMATION:

TELECOMUNICATION INFORMATION:

TELECOMUNICATION INFORMATION:

TELECOMUNICATION INFORMATION:

SEQUENCE CARACTERISTICS:

LENTH: 1391 main acids

TYPE: amino acid

STRANDEDNESS: Single

TOPOLOGY: Ilnear

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APPLICANT: PRETICE, WILLIAM A.
APPLICANT: PRETICE, WILLIAM A.
APPLICANT: PRETICE, WILLIAM A.
APPLICANT: PRETICE OF INVESTIONS SUDUNIT PRETICES AND REAGANTS SPECIFIC FOR MEMBERS OF THE
TITLE OF INVESTIONS SUDUNIT PRETICES AND REAGANTS SPECIFIC FOR MEMBERS OF THE
TITLE OF INVESTIONS SUDUNIT MULTICENE FAMILY
CONRESPONDENCE, DODRESS:
ADDRESSES: 12 ON SUDUNIT MULTICENE FAMILY
CONRESPONDENCE MORE SOURCES:
CONTRICT 2000 FEMINISON & POERSTER
CITYET: WASHINGTON N.M. STE. 5500
CONTRICT OF THE STEADLE FORM:
WENDING THE PROPPY OF THE STEADLE FORM:
CONFIDENT IN COMPATA:
CONFIDENT IN COMPATA:
PRELICATION NOMER: US/08/937,236
CURRENT APPLICATION NOMER: US/08/937,236
FILLING DATE: REACHING NOMER: US/08/937,236
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FILLING DATE: LING DATE: US/08/937,236
FILLING DATE: US/08/93
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                                                                                                           720 PNYDPLCSLCTCQRRTVICDPVVCP-----PPSCPHPVQAPDQCCPVCPE----K 765
Matches 37; Conservative 14; Mismatches 69; Indels 48; Gaps
                                                         1 PSKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTHTRVLOGYLPALPQVVCNY 60
                                                                                                                                                                     621 POCKVSNCTEDLVRDGCLIKRCNETSKTTYWENVDCSNTKIEFAKDDKSETMCKQYYSTT 680
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Best Local Similarity 20.2%; Pred. No. 1.38+02;
Matches 33; Conservative 23; Mismatches 63; Indels 44; Gaps
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                                                                                                                                                                                                                                                                                        100 D--CGGPKDHPLTCDDP-RFQDSSSSKAPP----PSLPSPSRLPGP 138
                                                                                                                                                                                                                                                                                                                                  822 EVHCEKVQCPRIACAQPVRVNPTDCCKQCPVGSGAHPQLGDPWQADGP 869
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Patent No. 6187310
GENERAL INFORMATION:
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